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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

ALL FBI INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 03-13-2009 BY 60324 uc baw/cs

Mr. Tolson	✓
Mr. Sullivan	✓
Mr. Mohr	✓
Mr. Casper	✓
Mr. Callahan	✓
Mr. Conrad	✓
Mr. Felt	✓
Mr. Gale	✓
Mr. Rosen	✓
Mr. Sullivan	✓
Mr. Tavel	✓
Mr. Trotter	✓
Tele. Room	✓
Miss Holmes	✓
Miss Gandy	✓

Wagoner

Honorable J. Edgar Hoover, Director
Federal Bureau of Investigation
U. S. Department of Justice
Washington, D. C. 20535

Dear Mr. Hoover:

Reference is made to FBI memorandum dated February 3, 1971, at Philadelphia, Pennsylvania, concerning Dr. Zalman M. Shapiro. *af*

In accordance with arrangements made through FBI Headquarters, [redacted] and [redacted] of my staff, interviewed [redacted] on March 4, 1971, in Reading, Pennsylvania. A summary of the interview is enclosed.

I wish to express my appreciation for the courtesies extended to [redacted] and [redacted] by Special Agent [redacted] of the Reading, Pennsylvania, FBI Office. I would appreciate it if you will express my gratitude to Special Agent [redacted].

Sincerely,

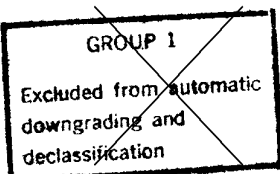
William T. Riley
William T. Riley, Director
Division of Security

Enclosure:

Interview of [redacted]

(Cy 1, Series A)

REC-30



This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

*per DOE letter 6/6/85
5668 SLD/mbf 6/19/85*

When separated from enclosures, handle this document

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(Insert proper classification)

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ALL FBI INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 03-13-2009 BY 60324 uc baw/rs

This document consists of 2 pages
No 1 of 2 Copies, Series A

INTERVIEW OF [REDACTED]

On March 4, 1971, [REDACTED] Kawecki Berylco Industries, Inc. (KBI) was interviewed in his office by [REDACTED] of the Atomic Energy Commission. The interview was for the purpose of clarifying his statement to the FBI [REDACTED]

[REDACTED] stated that Dr. Shapiro came to KBI as Corporate Vice President about July 20, 1970. He stated that this was a new position created by KBI.

According to [REDACTED] several weeks after he arrived (probably the first week in August) Dr. Shapiro asked for a briefing [REDACTED] Dr. Shapiro brought [REDACTED] with him to the meeting. [REDACTED] stated that before any discussion of the project started, he checked the clearance status of Dr. Shapiro and [REDACTED] with [REDACTED] Vice President in charge of Classification and Security. He stated that when [REDACTED] informed him that neither Dr. Shapiro nor [REDACTED] had an AEC clearance for KBI work, he cancelled the meeting.

[REDACTED] stated that sometime in January 1971, Dr. Shapiro again contacted [REDACTED] and asked for a briefing [REDACTED] [REDACTED] reminded Dr. Shapiro that he could not discuss the project since KBI had not yet received an AEC authorization to grant Dr. Shapiro access to this information, Dr. Shapiro stated that he still wanted to talk about the project. [REDACTED] advised that he did meet with Dr. Shapiro and discussed the project on an unclassified basis, covering items such as personnel requirements and production schedules.

[REDACTED] stated that Dr. Shapiro had not requested any information mentioned above. He further added that he had no reason to believe Dr. Shapiro had received any classified information concerning this AEC project since Mr. Lowry, President of KBI Industries, had specifically informed the principal KBI management employees that Dr. Shapiro did not have appropriate AEC clearance and should not be given access to project information.

GROUP 1
Excluded from automatic
downgrading and
declassification

This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

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According to the records of the Division of Security, AEC Headquarters, as of early August 1970 the AEC had not authorized KBI to grant Dr. Shapiro or [] access to classified AEC projects. Although they had not been granted an AEC clearance at the time for employment with KBI, both Dr. Shapiro and [] held active AEC clearances for access to classified information in connection with prior employment with other AEC contractors. In September 1970, the AEC authorized KBI to afford access to AEC classified information to [] following his employment by KBI on September 1, 1970. The AEC has not authorized KBI to grant Dr. Shapiro access to AEC classified information.

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- 1 - Mr. B. Adams
- 1 - Mr. J. A. Mintz (Sent Direct)
- 1 - Mr. T. W. Leavitt
- 1 - [Redacted]
- 1 - [Redacted]

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The Attorney General

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OTHERWISE

4/22/76

Director, FBI

DR. ZALMAN MORDECAI SHAPIRO
ATOMIC ENERGY ACT

Class. & Ext. By SP/6SK/RB6
Reason - FCIM II, 1-2.4.2
Date of Review 4/22/96 2.3

6/3/82

As you have been previously advised, Senator Howard Baker of the Joint Committee on Atomic Energy and Mr. George Murphy, Executive Director of the Committee, were orally briefed on March 19, 1976, in regard to the FBI investigation into the activities of Shapiro and the Nuclear Material Equipment Corporation (NUMEC), an Atomic Energy Commission subcontractor in Apollo, Pennsylvania.

(U) By letter dated April 9, 1976, Mr. Murphy requested the FBI furnish the Joint Committee any and all documents relating to Shapiro and other individuals associated with the possible diversion of special nuclear material from the United States to a foreign government. Mr. Murphy indicated these files should include, but not be limited to, information on alleged intelligence activity concerning Shapiro or any of his associates or acquaintances who could be involved in intelligence or diversion of nuclear material activities on behalf of a foreign government. (C)

On April 19, 1976, Mr. Murphy orally requested the above information be submitted immediately. Mr. Murphy was advised that the FBI could furnish him with a memorandum concerning Shapiro but that the release of copies of file documents would have to be approved by the Attorney General.

REC-36

117-2564

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- Director Sec'y _____

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SEE NOTE PAGE 3

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FBI AUTOMATIC DECLASSIFICATION GUIDE
EXEMPTION CODE 25X(1,6)
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The Attorney General

Consequently, the attached memorandum and copies of pertinent file documents are being submitted to you for review and determination concerning the release of this memorandum and pertinent documents to George Murphy of the Joint Committee on Atomic Energy.

This Bureau suggests you forward the attached memorandum to Mr. Murphy but we are concerned about releasing copies of investigative file documents to the Joint Committee. This release of our documents has not been done in the past and it is believed that if done in this instance it will establish a precedent. The only exceptions to this have been the documents provided the Senate and House Intelligence Committees.

It is noted that the request for file copies of FBI documents were not received from the Chairman or from members of the Joint Committee but from George Murphy the Executive Director.

For the information of the Attorney General
the attached documents [redacted]

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Enclosures

- 1 - The Deputy Attorney General (Enclosure)
- 1 - Assistant Attorney General
Office of Legislative Affairs (Enclosure)

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The Attorney General

NOTE:

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(S) [Redacted]

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Consequently, Senator Baker and Mr. Murphy, upon their requests, were orally briefed of the FBI investigations of Shapiro and NUMEC.

(C)

(C) [Redacted]

Mr. Murphy therefore has requested copies of FBI file documents be furnished to the Committee. The Legal Counsel Division on 4/19/76, advised Mr. Murphy that a LHM concerning this material would be furnished to him but the release of copies of file documents would have to be approved by the Attorney General.

The attached memorandum and pertinent file documents are therefore being furnished the Attorney General for his review and appropriate action in accordance with instructions of the Legal Counsel Division as set forth in their memorandum to Mr. J. B. Adams, dated 4/19/76.

The original^{and one} of the LHM is being furnished the Attorney General with copies to the Deputy Attorney General and the Assistant Attorney General-Legislative Affairs.

(C)

(C) [Redacted]

APPROVED: <i>[Signature]</i>	Comp. Syst.....	Laboratory.....
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EXEMPTION CODE 25X(1,6)
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1 - Mr. J. B. Adams
1 - Mr. J. A. Mintz
1 - Mr. T. W. Leavitt
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April 22, 1976

**DR. ZALMAN MORDECAI SHAPIRO
ATOMIC ENERGY ACT**

The Federal Bureau of Investigation (FBI) has conducted two investigations of Dr. Shapiro. The first investigation was prompted by the Atomic Energy Commission (AEC) advising this Bureau in 1965 that the Nuclear Materials Equipment Corporation (NUMEC), an AEC subcontractor in Apollo, Pennsylvania, was negotiating with the Government of Israel to establish a joint company in Israel to be known as Israeli NUMEC Isotopes and Radiation Enterprises (ISORAD), Limited. The firm was to engage in the irradiation of citrus fruit. A Foreign Agents Registration Act investigation was initiated to determine if Shapiro was acting as an agent of the Israeli Government in the United States. During the course of this investigation, Shapiro was interviewed. He claimed his close relationship with the Israeli Government was strictly a business matter.

The results of this investigation were furnished to the Justice Department. In September, 1966, the Justice Department advised that the activities of Shapiro and NUMEC did not fall under the purview of the Foreign Agents Registration Act.

In February, 1966, the AEC advised there were indications that NUMEC was lax in the management of nuclear materials. Since April, 1957, AEC had made extensive internal technical checks at NUMEC and had reported the situation to the Joint Committee on Atomic Energy (JCAE). The Joint Committee was told by AEC on February 14, 1966, that in the absence of evidence or suspicion of a violation of the law, AEC had determined that inquiry by the FBI was not then warranted.

117-2564

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Exempt from GDS, Category 3
Date of Declassification Indefinite

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Declassify on: OADR

SPR/GSK/RBY
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NATIONAL SECURITY INFORMATION
Unauthorized Disclosure
Subject to Criminal Sanctions

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Dr. Zalman Mordecai Shapiro

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According to AEC, NUMEC received 1,012 kilograms of uranium-235 from AEC to process into fuel elements for nuclear reactors for space propulsion. This subcontract was completed on October 31, 1964. In April, 1965, an AEC inventory indicated a loss, fixed by a later AEC check in November, 1965, at 61 kilograms valued at \$764,000. In addition, a survey of the plant's operations since 1957 revealed that NUMEC had experienced a total cumulative loss on all AEC subcontracts of 178 kilograms, all but 61 of which AEC considered properly accounted for by normal processing losses. AEC was unable to say unequivocally that theft or diversion of the 61 kilograms had not taken place, but AEC believed that NUMEC consistently underestimated its processing losses and that the loss of the 61 kilograms charged to the latest subcontract actually reported an accumulation of losses over an 8-year period. AEC pointed out, however, that because the NUMEC records system was not then so set up, no determination could be made as to when the various losses occurred or whether material provided for the latest subcontract was used knowingly or inadvertently, to offset losses on other contracts. (S)(u)

per DOC
letter
6/10/85
56685-D/amy
4/7/85

AEC advised that there would be no financial loss to the Government as NUMEC had agreed to pay for the 61 kilograms. In addition, NUMEC had developed a better system for controlling nuclear materials and an improvement was also expected due to NUMEC's hiring of a former AEC official. AEC advised, however, that prior to making more penetrating checks into NUMEC's operations, it was felt the FBI should be consulted to determine whether the FBI desired to assume investigation of the matter. (u) (S)

per DOC
letter
6/10/85
56685-D/amy
4/7/85

The FBI advised AEC on March 1, 1966, that the FBI had given full consideration to this matter and that under the circumstances presented by AEC, the FBI did not intend to assume any investigative responsibility; however, it was requested that AEC advise the FBI of any further developments coming to its attention concerning this matter which would indicate there had been a violation within FBI jurisdiction.

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Dr. Zalman Mordecai Shapiro

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The investigation, which included the use of sensitive sources, determined that Shapiro had a very strong personal sympathy for the Israeli cause. His immediate circle of friends included a number of persons known to be active or ardent sympathizers with the Israeli cause. Shapiro was a close personal friend of David Lowenthal, a former Freedom Fighter for Israel, who frequently visited Israel.

(S)

David Lowenthal is the President of Raychord Corporation in Apollo, Pennsylvania. Lowenthal is also an officer of Apollo Industries in Pittsburgh, a company which was instrumental in establishing NUMEC through investment of a substantial amount of money in NUMEC stock. The investigation also determined that Shapiro made a number of visits to Israel where he was treated with consideration that exceeded what his position would normally call for. (S) (U) (S)

(U)

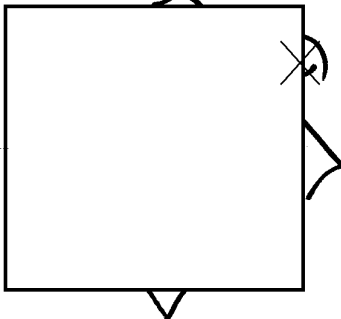
(U)

Several sources advised that Shapiro felt so strongly for the Israeli cause that he seriously considered emigrating to that country. Shapiro was active in fund raising and bond drives and was a heavy contributor to activities on behalf of Israel in the United States. (S) (U)

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Dr. Zalman Mordecai Shapiro

(U) It was also established that Shapiro was acquainted with Avrahan Hermoni, Scientific Attache of the Israeli Embassy in Washington, D. C. On November 3, 1968, apparently at the request of Hermoni, Shapiro arranged a meeting at his home which was attended by 11 United States scientific and technical people, some of whom in the past have been associated with the AEC program. During this meeting Hermoni apparently requested that each of the individuals undertake certain information gathering assignments on behalf of Israel. Further investigation was unable to determine whether any of the information requested or subsequently passed by any of those individuals involved classified information. Hermoni was assigned to the Israeli Ministry of Defense and specifically assigned weapon production responsibility. (S)

(U) In September, 1968, Colonel Avraham Eylonie, a senior official of Israel's Military Intelligence Service, was in the United States and had several meetings with Shapiro in Apollo, Pennsylvania, and Washington, D. C. (S)

(S)

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per DOE
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Shapiro resigned his position as President of NUMEC in June, 1970. In January, 1972, Shapiro was employed as the Assistant in Charge of the Breeder Reactor Division, AEC, Westinghouse Electric Corporation, Monroeville, Pennsylvania. He held no security clearance and did not have access to classified materials. By letter dated April 15, 1969, the Department of Justice advised that based on the results of the FBI investigation conducted to date, the facts of the matter were not such as to warrant action against Shapiro.

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APPROVED:

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Re: Dr. Zalman Mordecai Shapiro

Employment

Mr. Shapiro held numerous part-time jobs between the years of 1937 and 1941. Beginning in June, 1942, and ending in June, 1946, Mr. Shapiro was employed as a research associate at Johns Hopkins University. From June, 1946, through February, 1948, he was a Junior Instructor at the University. From August, 1948, to February, 1949, when he applied for his clearance, he was employed as an engineer at Westinghouse Electrical Corporation, Pittsburgh, Pennsylvania.

Marital Status

Mr. Shapiro is married to the former [redacted]
[redacted]

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Interviews

Dr. Walter Patrick, Chemistry Department, Johns Hopkins University, advised in 1949 that he had known Mr. Shapiro for about six years and that the applicant had studied and conducted research work directly under him for about two years prior to 1948. Dr. Patrick considered Mr. Shapiro to be an excellent chemist and well-mannered, of excellent moral stability and thoroughly reliable. He stated that the applicant was a loyal American citizen and is anti-communist. He stated Mr. Shapiro's political views agreed with many of the opinions expressed by the progressive citizens of America as opposed to the views of the more conservative political parties. Dr. Patrick advised that Mr. Shapiro could be trusted with confidential data. He stated that Mr. Shapiro had performed valuable work on a confidential research project during the war and had done an excellent job.

Dr. Richard Evans, Catalyst Research Corporation, Falls Road, Maryland, advised in 1949 that he had worked with Mr. Shapiro on a confidential research project for the government at Johns Hopkins University from July, 1942, until

Re: Dr. Zalman Mordecai Shapiro

July, 1946. Dr. Evans stated he had trusted Mr. Shapiro with the most confidential data. Dr. Evans believed Mr. Shapiro to be entirely loyal and trustworthy and stated Mr. Shapiro associated with persons of reputable character at the University. Dr. Evans recommended Mr. Shapiro most highly for a position of trust and responsibility.

Eighteen additional persons, consisting of neighbors, references, professional associates and social acquaintances were interviewed. They commented favorably concerning his character, loyalty, reputation, associates and morals. They recommended him for a position of trust and confidence with the U. S. Government.

Those persons acquainted with his close relatives described them as reputable and loyal individuals.

Close Relatives

Mr. Shapiro's parents, Abraham and Minnie, were born in Poland and became citizens of the United States. In 1949, Abraham Shapiro was deceased. In addition to his wife mentioned previously, Mr. Shapiro, in 1949, had a sister, Zipparah Shapiro, [REDACTED]

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Credit and Arrest Checks

Information was received from appropriate credit reporting agencies indicating their files contained either no record or no additional pertinent information concerning Mr. Shapiro.

Information was received from appropriate law enforcement agencies indicating their files contained no information concerning Mr. Shapiro or his close relatives.

Re: Dr. Zalman Mordecai Shapiro

Miscellaneous

In filling out the personal security questionnaire in 1949, Mr. Shapiro indicated that he was a member of the Independent Citizens Committee of the Arts, Sciences and Professionals from 1946 to 1947. It is noted that the "Guidelines to Subversive Organizations and Publications" prepared and released by the Congressional Committee on Un-American Activities in May, 1951, cited the Independent Citizens Committee of the Arts, Sciences and Professionals as a communist front organization.

On August 10, 1953, an Atomic Energy Act employee re-investigation of Shapiro was instituted at the request of the Atomic Energy Commission. This investigation was to bring the original applicant investigation up to date. The results of this investigation are as follows:

Employment

Mr. Shapiro began employment at the Atomic Power Division of the Westinghouse Electrical Corporation at West Mifflin, Pennsylvania, on March 1, 1949, and as of October, 1953, he was still employed there. He had previously been employed at the Westinghouse Research Laboratories, Pittsburgh, Pennsylvania.

Interviews

Nine persons, consisting of neighbors, professional associates, acquaintances and references were interviewed. These individuals recommended Mr. Shapiro highly for any position of trust. In general, they advised that Mr. Shapiro and his wife were of excellent character and reputation and they knew of no questionable associates or associations and believed Mr. Shapiro to be a loyal American. One individual commented that Mr. Shapiro was not the type to have anything to do with communism or subversive organizations.

Re: Dr. Zalman Mordecai Shapiro

Credit and Arrest Checks

Information was received from appropriate credit reporting and law enforcement agencies that indicated there was no derogatory information contained in their files in regard to Mr. Shapiro.

NOTE:

Original and one copy were furnished to the Attorney General, one copy to the Deputy Attorney General and one copy to the Assistant Attorney General, Office of Legislative Affairs.

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April 27, 1976

DR. ZALMAN MORDECAI SHAPIRO
ATOMIC ENERGY ACT APPLICANT

An Atomic Energy Act Applicant investigation was instituted on February 24, 1949, in accordance with the provisions of the Atomic Energy Act of 1946. This investigation concerned the character, associates and loyalty of Mr. Shapiro.

Mr. Shapiro had applied to the Atomic Energy Commission for a security clearance on the basis of his contemplated employment as a Research Engineer at Westinghouse Electrical Corporation, Pittsburgh, Pennsylvania.

The investigation of Shapiro revealed the following:

Birth and Citizenship

Mr. Shapiro was born on May 12, 1920, in Canton, Ohio, and is a United States citizen.

Education

Mr. Shapiro attended Johns Hopkins University, Baltimore, Maryland, beginning on September 22, 1938, as a candidate for an AB Degree. He received his degree on June 2, 1942. He re-entered the University as a graduate student in the chemistry department on October 18, 1943. He received his MA Degree in chemistry November 5, 1945. He continued at the University as a graduate student and received his Ph.D in chemistry on June 8, 1948.

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The Attorney General

Director, FBI

DR. ZALMAN MORDECAI SHAPIRO
ATOMIC ENERGY ACT APPLICANT

- Mr. J. B. Adams
- Mr. J. A. Mintz
- Mr. F. C. Fehl

April 27, 1976

1 - Mr. T. W. Leavitt

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Enclosed for your review prior to transmittal to Mr. George Murphy, Executive Director of the Joint Committee on Atomic Energy, is a summary memorandum of the Federal Bureau of Investigation Atomic Energy Act Applicant investigation conducted of Dr. Shapiro in 1949 and 1953.

Please advise this Bureau if you furnish this memorandum to Mr. Murphy.

Enclosure

1 - The Deputy Attorney General (Enclosure)

1 - Assistant Attorney General
Office of Legislative Affairs (Enclosure)

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DATE 6/3/82 BY SP-16SK/IRB6

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NOTE:

At a meeting on 4/23/76, between the Director and the Attorney General, it was decided that the enclosed LHM be submitted to George Murphy of the Joint Committee.

Murphy had requested the FBI investigative reports regarding the FBI applicant investigation of Shapiro conducted in 1949 and 1953. It was decided at the above-mentioned meeting that in lieu of FBI investigative reports, the summary memorandum would be submitted.

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FBI

Date: MAY 5, 1976

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Via _____

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FBI AUTOMATIC DECLASSIFICATION GUIDE

EXEMPTION CODE 25X(1)

DATE 10-15-2008

TO: DIRECTOR, FBI (117-2564)

FROM: SAC, WFO (117-273) (P)

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DIVERT

ON MAY 5, 1976, THE FOLLOWING INVESTIGATION WAS NOTED:



(2) - Bureau
 2 - WFO
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 Date of Review 5/5/96

WFO 6/1/82

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Approved: _____

Special Agent in Charge

ALL INFORMATION CONTAINED
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WFO IS CONTINUING ITS CONCENTRATED FILE REVIEW AND WILL
CONTINUE TO INTENSIFY ITS INVESTIGATION IN THIS MATTER.

Approved: _____ Sent _____ M Per _____
Special Agent in Charge

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Special Agent in Charge

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UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

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Copy to:

Report of:
Date:

SA [redacted]
5/14/76

Office:

Washington, D.C.

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Field Office File #:

117-273

Bureau File #:

117-2564

Title:

ZALMAN MORDECAI SHAPIRO

11-20-03
CLASSIFIED BY 60290 BCE/MLT/256
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AS AMENDED

Character:

ATOMIC ENERGY ACT;
OBSTRUCTION OF JUSTICE

Synopsis:

(U) On 4/29/76, this investigation was instituted upon request of the United States Attorney General indicating that an investigation be conducted to determine whether or not a diversion of nuclear material had occurred at the Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, partially owned and operated by the subject, [and if this diversion had been to the benefit of the Government of Israel]. Investigation to date, including interviews of individuals reportedly in possession of information pertaining to this matter and review of government records has reflected no evidentiary material or facts to indicate this diversion had taken place. Interviews to date have reflected supposition and theory based on analysis of circumstantial information.

- P -

DETAILS: AT WASHINGTON, D. C.

12/7/83 SP-4 elw/alw

Comp # 240,619
5668SLD/July 5/10/85

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Exempt from GDS, Category 2
Date of Declassification Indef

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WFO 117-273

The Attorney General of the United States requested that an investigation be conducted pertaining to the question of whether or not a diversion of nuclear material had taken place at the Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, partially operated and owned by the subject, ZALMAN MORDECAI SHAPIRO, [and if this diversion had been for the benefit of the Government of Israel] (U) Investigation was initiated on April 29, 1976 (S) (X)

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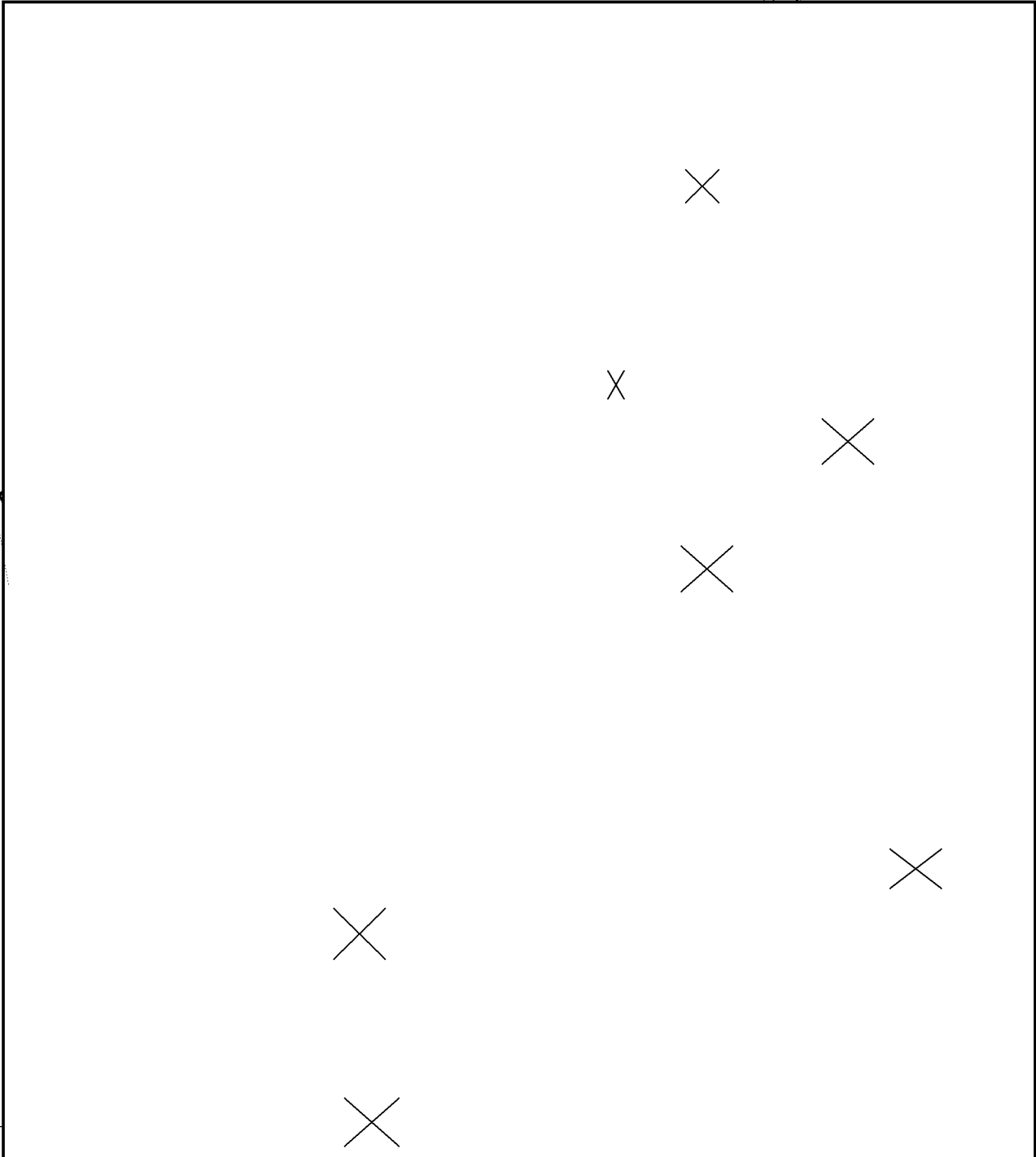
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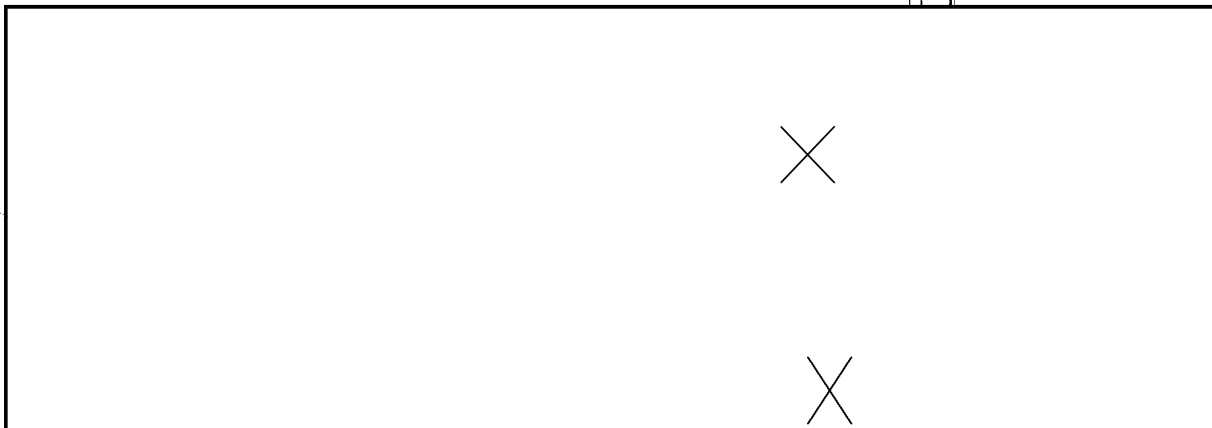
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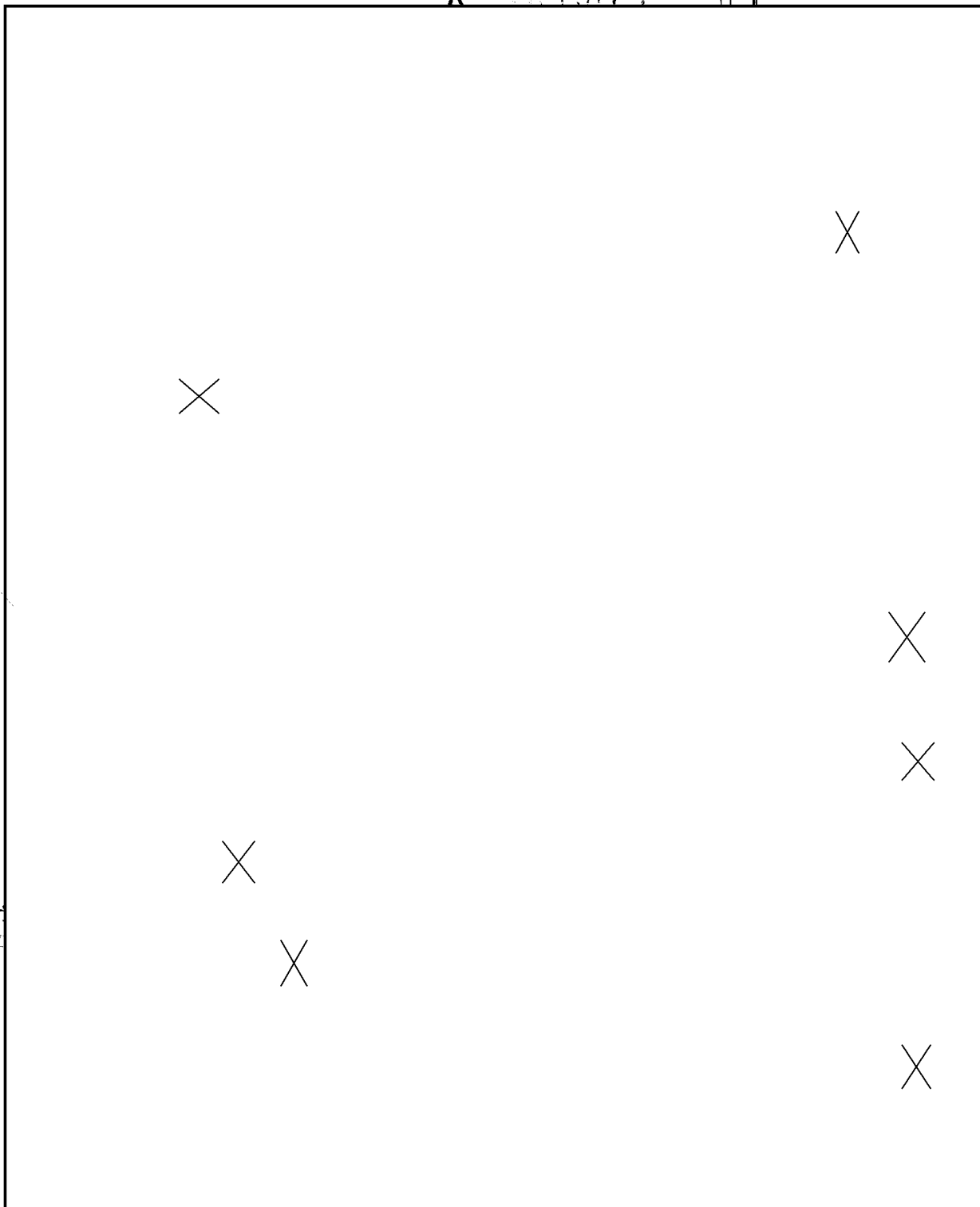
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FEDERAL BUREAU OF INVESTIGATION

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On May 3, 1976, ROBERT E. THARP, Deputy Director of Safeguards and Security, Energy Research and Development Agency (ERDA), furnished the following information to [redacted] who had identified themselves to THARP as Special Agents of the Federal Bureau of Investigation (FBI):

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The Nuclear Materials and Equipment Corporation (NUMEC) was founded by ZALMAN MORDECAI SHAPIRO at a time when the Atomic Energy Commission (AEC) was attempting to interest industry in the manufacture of nuclear fuel rods. As part of the inducement to manufacturers, the AEC exercised very little control over the handling of material and over physical security. There was no resident on-site inspection or audit and what inspections and audits were conducted were conducted infrequently. In addition to NUMEC there were a number of other manufacturers under contract to the AEC for the production of nuclear fuel rods, but most of the other firms held only one contract at a time. NUMEC was possibly the only firm at that time to have a series of overlapping contracts spanning several years. In each contract of the NUMEC type let by the AEC there was a provision that the manufacturer must return 100% of the material provided by the government. Loss of material is inherent in the production of the U-235 used in the fabrication of the nuclear fuel rod and at the time a bid is made on the contract the manufacturer is aware of financial penalties imposed for any loss of material. Presumably, loss of material and the consequent financial penalty exacted was taken into account in the bidding. When the average contractor completed his contract, the material not lost in production was returned to the AEC and the contractor paid for any loss of material. It was the opinion of AEC that in the case of NUMEC, because that corporation held a series of overlapping contracts, it would have been possible for the firm, when completing one contract, to return to the AEC the full amount of material called for by the contract. This could have been accomplished by borrowing material from the following and overlapping contract. It is felt by AEC that this was apparently done over a series of contracts and over a span of years. In any event, when

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NUMEC completed its final contract it had no follow-on contract material to borrow from and NUMEC had to admit to a serious shortage of material which it paid for under the terms of the last contract. THARP was unaware as to whether NUMEC may have returned 100% of the material on all but the last contract: whether it may have paid for only minimal losses or just how the loss discovered at the conclusion of the final contract was accrued.

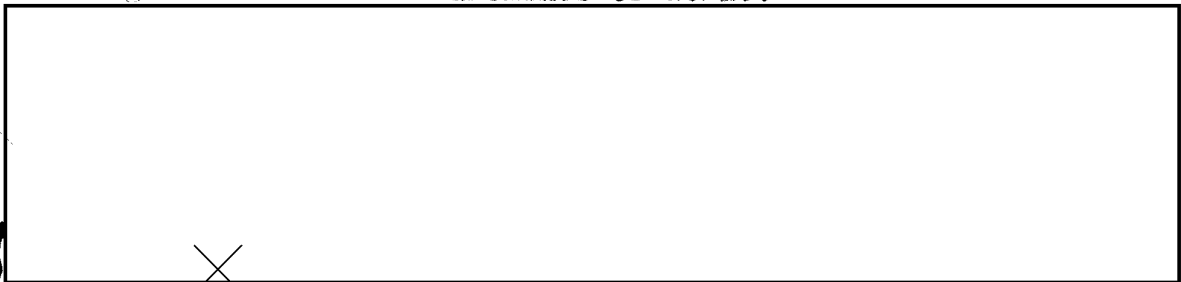
SHAPIRO was interviewed by representatives of the AEC concerning the lost material but he made no admission to indicate that he was juggling material from one contract to another. He merely attributed the loss to the fact that the loss contained in the waste material had been underestimated. He had to concede that the loss had to have occurred over a number of contracts and could not have been attributed solely to his final contract. (u)

THARP advised that SHAPIRO actually developed the process used by industry for the manufacture of nuclear fuel and is of the opinion that when AEC conducted an examination of NUMEC's performance it was found that the shortage of material experienced by NUMEC over the years and over the span of its contracts was more or less in line with that experienced by other manufacturers under contract to AEC at that time.

THARP considers that no diversion of material took place because SHAPIRO could not have accomplished it alone. THARP feels that a successful diversion of material would have required a conspiracy of considerable magnitude extending through a number of departments of NUMEC.

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THARP displayed to the interviewing Agents five boxes of material which he stated consists primarily of the

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complete AEC investigation of NUMEC with supporting documents. He noted that much of the material in the five boxes was of a highly technical nature and said that Agents may require the assistance of a man trained in the field of nuclear fuel for its full understanding. (X)

THARP noted that a personnel and security file maintained on SHAPIRO is now in possession of the Congressional Joint Committee on Atomic Energy. It will be made available for review upon its return. (X)

THARP continued that he has also recently furnished to the White House two black loose leaf books containing an overall unclassified summary and fact sheet involving the situation regarding NUMEC. Also contained in this material are thirty-three letters through which the AEC reported on the matter to the Congressional Joint Committee on Atomic Energy. (u) Also furnished to the White House by THARP were three red covered books containing a summary survey report of AEC interviews with former and current employees of NUMEC; a report on all overseas shipments of U-235 and a copy of the SHAPIRO interview conducted in August of 1969 by a representative of the Division of Security and the General Counsel Office of AEC. (S)(u)

THARP also noted that there were two General Accounting Office reports made on the "NUMEC matter". In the presence of interviewing Agents, THARP initiated inquiries with the following offices of ERDA for the purpose of determining what, if any, files are available through those offices concerning the NUMEC matter: (X)

Office of Internal Review and Audit, Office of the General Counsel, Office of the Controller and the Contracts Division.

On May 4, 1976, recontact was made with Mr. THARP at which time the following was determined. He has not had a full response from inquiries initiated by him the previous day directed at locating additional files relating to NUMEC, possibly held by ERDA. However, certain additional files have been located and he specifically noted that all contracts executed between the AEC and NUMEC are in the possession of ERDA. They have been located and will be made available for review.

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/13/76

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On May 7, 1976, THOMAS JAMES HAYCOCK, JR., Assistant Director for Information Support, Division of Safeguards and Security, Energy Research and Development Agency (ERDA), advised as follows:

He is familiar with the investigation of Nuclear Material and Equipment Corporation (NUMEC) conducted by the Atomic Energy Commission (AEC) in the 1960s, although he was not a member of the AEC staff conducting the investigation.

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(U) In 1962 he was the second United States citizen to visit the Israeli reactor at Dimona, Israel. ~~(S)~~ ~~(C)~~

At that time he was given a tour of the facility, including a tour of the building under construction next to the reactor itself.

para 5, 6, 7, sub bracket in para 8
per DOE letter 6/6/75 Sect 5.2 Aug 6/7/75

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(C) On arriving back in the United States following his tour of Dimona, he wrote a trip report

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As regards NUMEC, it is his feeling that NUMEC's losses of U-235 compared favorably with U-235 losses from other facilities involved in the same type of work at the same time. ~~X~~

In support of this contention he provided the two documents from ERDA files showing losses of U-235 suffered by NUMEC and other privately owned companies from 1957-1966 and 1966-1968 which are attached.

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FEDERAL BUREAU OF INVESTIGATION

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Date of transcription 5/14/76

[redacted] was contacted at the Consolidated Edison Company, 4 Irving Place, New York, New York, where he was employed as an Executive Assistant to the Chairman of the Board to Consolidated Edison. At the outset of the interview SA [redacted] advised [redacted] that he was being interviewed in conjunction with a directive to the FBI from the Attorney General [redacted] (S)

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[redacted] Furthermore, [redacted] was cautioned that this was an extremely sensitive investigation, and that it should be treated with utmost confidentiality. [redacted] furnished the following information:

[redacted] advised he was employed as a Special Agent of the Federal Bureau of Investigation (FBI) from January, 1950, to August, 1956. Upon leaving the FBI, he immediately commenced employment with the United States Senate in the Joint Committee on Atomic Energy (JCAE). In 1962 he became a Staff Director for JCAE, and he remained with the JCAE until October, 1968.

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[redacted] stated that during his service as Executive Director of the JCAE he was aware of the loss of an unrecalled quantity of U-235 from the Apollo, Pennsylvania, plant of NUMEC (Nuclear Materials and Equipment Corporation). He believed this matter came to his attention in the normal course of business with the Atomic Energy Commission (AEC) who had a statutory obligation to keep the JCAE fully informed on security and accountability problems. [redacted] recalled that upon receipt of this notification, he promptly dispatched several of his people on the JCAE to check out the situation at NUMEC, which was then headed by Dr. ZALMAN SHAPIRO. He emphasized that at that time the JCAE was extremely interested in any type of accountability problem, and this was an area in which they were following very closely with the AEC.

[redacted] identified [redacted] the present Staff Director of JCAE, as one of the men he sent to NUMEC at the time of the reported loss. In addition, he believed [redacted] and [redacted] participated in this investigation by the JCAE. He advised that [redacted] was currently a Deputy on the JCAE

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WFO 117-273

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staff, and [] was working as a consultant to Representative FRANK HORTON from New York. Further, he furnished [] home address as []

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[] recalled that [] doggedly pursued the investigation at NUMEC because he had strong feelings there could be a diversion involved. However, at no time did [] furnish him anything to hang his hat on. He remarked that if there would have been the slightest evidence of a diversion he would have pushed for a vigorous investigation. Also, he reported that at the time of the JCAE probe, the AEC Safeguards Group was inspecting SHAPIRO's operation regarding licensing arrangements because NUMEC was then dealing in government materials. He was unable to recall the specific nature of these contracts but was aware they were United States Navy contracts calling for the fabrication of nuclear fuel elements. He added that a residue loss is inherent in an operation of this nature, and there is always a dispute on the Normal Operating Loss (NOL) figures attributed to such a process.

[] remembered there was an inability to account for this loss at NUMEC, but no hard evidence surfaced which pointed to any diversion. In this regard, he stated he had no first-hand knowledge of the situation at NUMEC; however, he was very interested in it at the time. He personally suspected that the loss at NUMEC involved a "kiting" operation rather than an actual theft, but he did not have facts to support this. With respect to the "kiting", he pointed out that NUMEC was involved in a number of overlapping contracts; consequently, any shortages could be made up by receiving credit for material he did not use in connection with another contract. The only way this loss could finally be pinned down would be to shut down the plant completely and conduct a thorough cleanup.

Additionally, [] advised he was casually acquainted with Dr. ZALMAN SHAPIRO, and his last personal meeting with him occurred approximately one week ago. This meeting was in connection with an organization known as Americans for Energy Independence (AEI) for which SHAPIRO is a primary fund raiser. He stated SHAPIRO's current employer, the Westinghouse Electric Corporation, assigned SHAPIRO to this position.

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/14/761

KENNETH R. CHAPMAN, Director, Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory Commission (NRC), Suite 10718, 7735 Old Georgetown Road, Bethesda, Maryland, furnished the following information:

He retired as a Major General from the United States Air Force and joined NRC about one year ago. He stated that he possessed no independent information concerning ZALMAN MORDECAI SHAPIRO or the Nuclear Materials and Equipment Corporation (NUMEC) of Apollo, Pennsylvania. [redacted]

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[redacted] concerning SHAPIRO and NUMEC. Present at this briefing had been the five NRC Commissioners, as well as BENJAMIN HUBER, Director, Office of Policy Evaluation, NRC, and CARL H. BUILDER, Director, Division of Safeguards, NRC. Information was furnished at the briefing concerning an alleged "tie-in" between NUMEC and foreign nationals and the possibility of a diversion having occurred in connection with reported losses of U-235 at the NUMEC plant.](S)

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Interviewed on 5/11/76 at Bethesda, Maryland File # WFO 117-273
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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/14/761

HAROLD D. THORNBURG, Acting Deputy, Director, Office of Inspection and Enforcement, Nuclear Regulatory Commission (NRC), Room 321-C, 4350 East West Highway, Bethesda, Maryland, furnished the following information:

From 1960 to 1963, he served as a Reactor Inspector at the Atomic Energy Commission (AEC) Headquarters, Germantown, Maryland.

From 1963 to 1971, he served as a Senior Reactor Inspector for AEC Region 3, Glen Ellyn, Illinois.

From 1971 to the present, he served at AEC Headquarters and NRC Headquarters.

He stated he had never been briefed and possessed no personal or independent information concerning ZALMAN MORDECAI SHAPIRO and the Nuclear Materials and Equipment Corporation (NUMEC) of Apollo, Pennsylvania.

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RALPH G. PAGE, Deputy Director, Division of Safeguards, Nuclear Regulatory Commission (NRC), 7735 Old Georgetown Road, Bethesda, Maryland, furnished the following information:

He commenced employment for the Atomic Energy Commission (AEC) in 1955 at Oak Ridge, Tennessee. During the period from 1962 to 1967, he had been Chief of the Enforcement Branch of the Division of State and Licensee Relations, which was a part of the Regulatory Organization of AEC, at AEC Headquarters, Germantown, Maryland. [During this period, he had read the results of AEC reports reporting the loss of about 100 kilograms of U-235 by the Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, in 1965, as well as reports of AEC investigations concerning this loss and other losses by NUMEC.] Prior to 1965, AEC had no safeguards to protect against such losses, except for AEC Manual Chapter requirements in contracts. He stated that AEC investigations had developed no evidence that NUMEC losses involved an actual theft or diversion of U-235. Further, subsequent continuing losses by NUMEC and succeeding firms using the NUMEC plant, as well as losses suffered by the Nuclear Fuel Services plant in Erwin, Tennessee, have indicated that the losses were possibly due to the uniqueness of these two plants. Neither plant was originally designed for the nuclear operations being conducted there and both are conducting similar operations using gaseous diffusion techniques in recovering U-235 from scrap which also involve similar problems. (R)(u) per DOE letter 6/6/85 5668547/mby 6/7/85

PAGE stated he possessed no personal or independent information concerning ZALMAN MORDECAI SHAPIRO or NUMEC which would offer evidence to contradict earlier AEC investigative results.

Interviewed on 5/11/76 at Bethesda, Maryland File # WFO 117-273
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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/14/761

[redacted] Executive Director, Joint Committee on Atomic Energy (JCAE), was interviewed in his office in the Capitol by Special Agents (SAs) [redacted] and [redacted] who had identified themselves as SAs of the Federal Bureau of Investigation (FBI).

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[redacted] proceeded to relate the background and a brief history of the "SHAPIRO-NUMEC" case from about November, 1965, on as he knew it from information provided him or the JCAE by the Atomic Energy Commission (AEC) in 1966 and from information set out in a 1967 General Accounting Office (GAO) report on that subject, and he referred the interviewing agents to pertinent AEC and GAO reports for further detailed information.

[redacted] suggested that the following individuals employed by the AEC in the mid 1960s be contacted for further possible information of relevance in the matter in question:

[redacted] advised further that neither he nor anyone on the JCAE staff had conducted prior independent investigations in the SHAPIRO-NUMEC matter. He reiterated that all information known to him came from AEC or GAO reports or from the above-mentioned AEC officials. He indicated he had no current information to provide the FBI to assist it in its current inquiry.

[redacted] stated further that he had no concrete evidence which would indicate any possible diversion of any nuclear materials from NUMEC or any other facility. With reference to the possibility that there might have been interference from any source whatsoever which might have influenced or limited prior investigations in the SHAPIRO-NUMEC case, [redacted] replied that "he had no specific knowledge or even basis for speculation concerning any possible curtailment of the previous investigation conducted concerning NUMEC."

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ed on 5/10/76

Washington, D.C.

File # WFO 117-273

by

Date dictated

5/12/76

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[9 October 1968]

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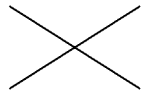
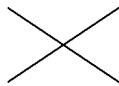
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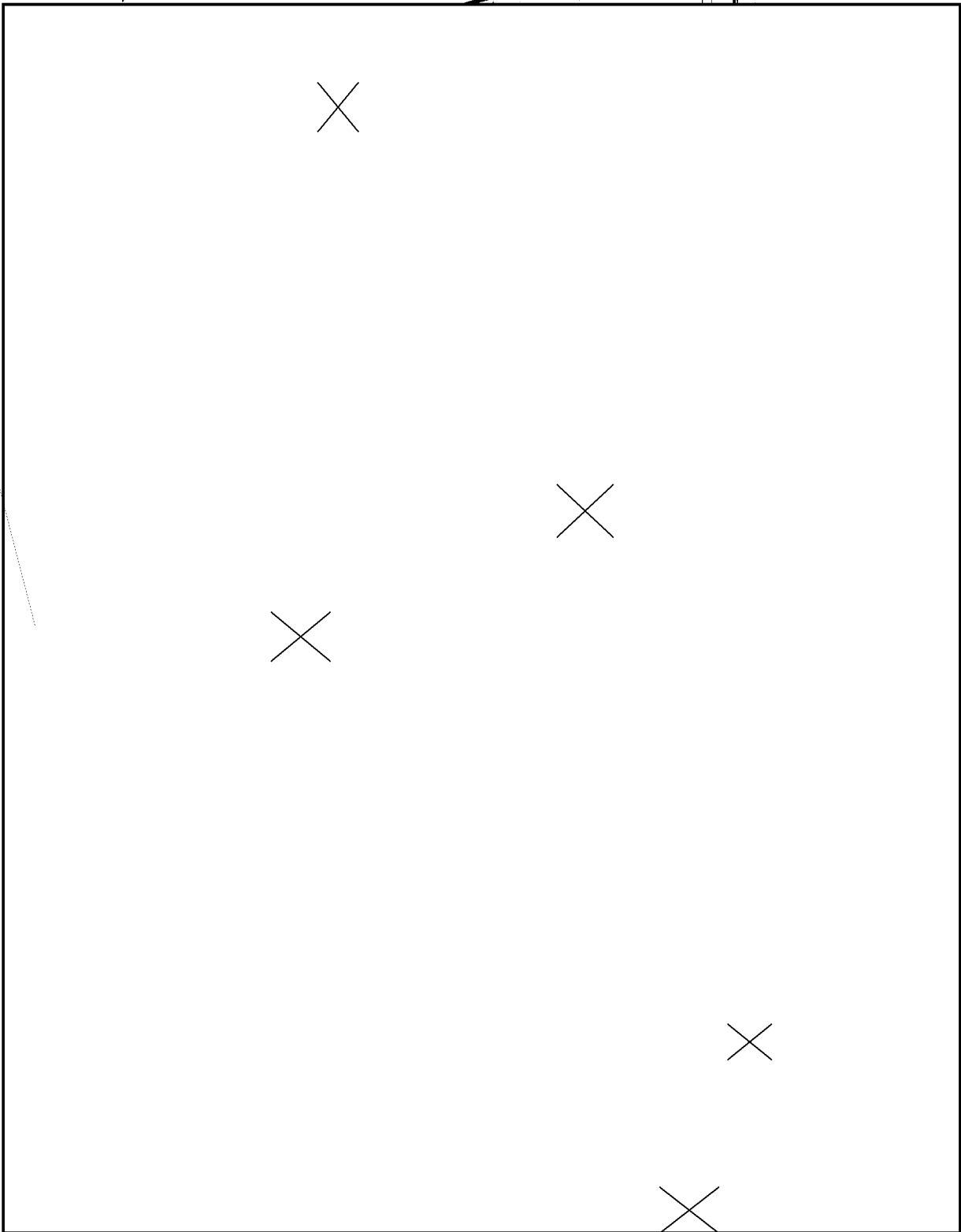
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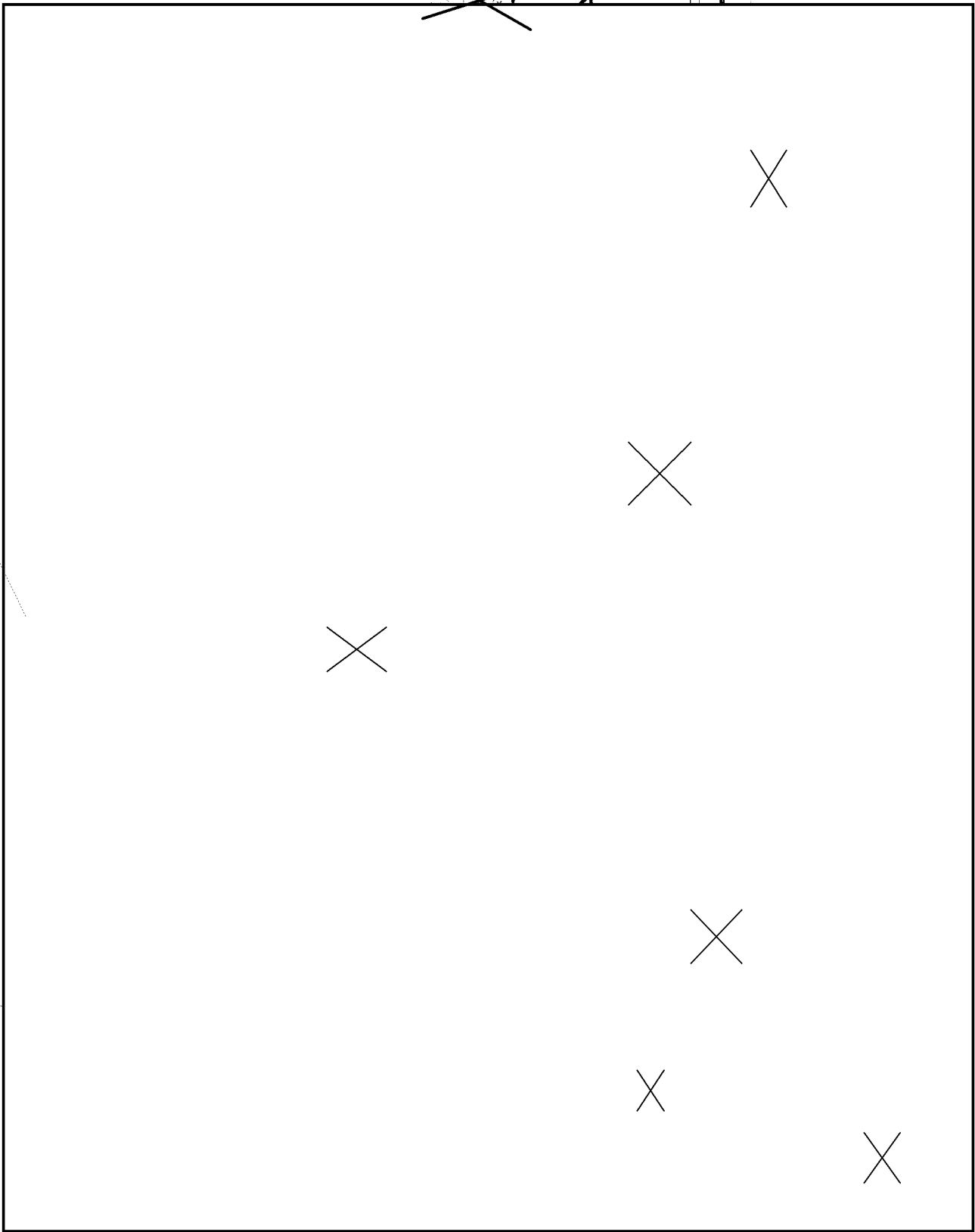
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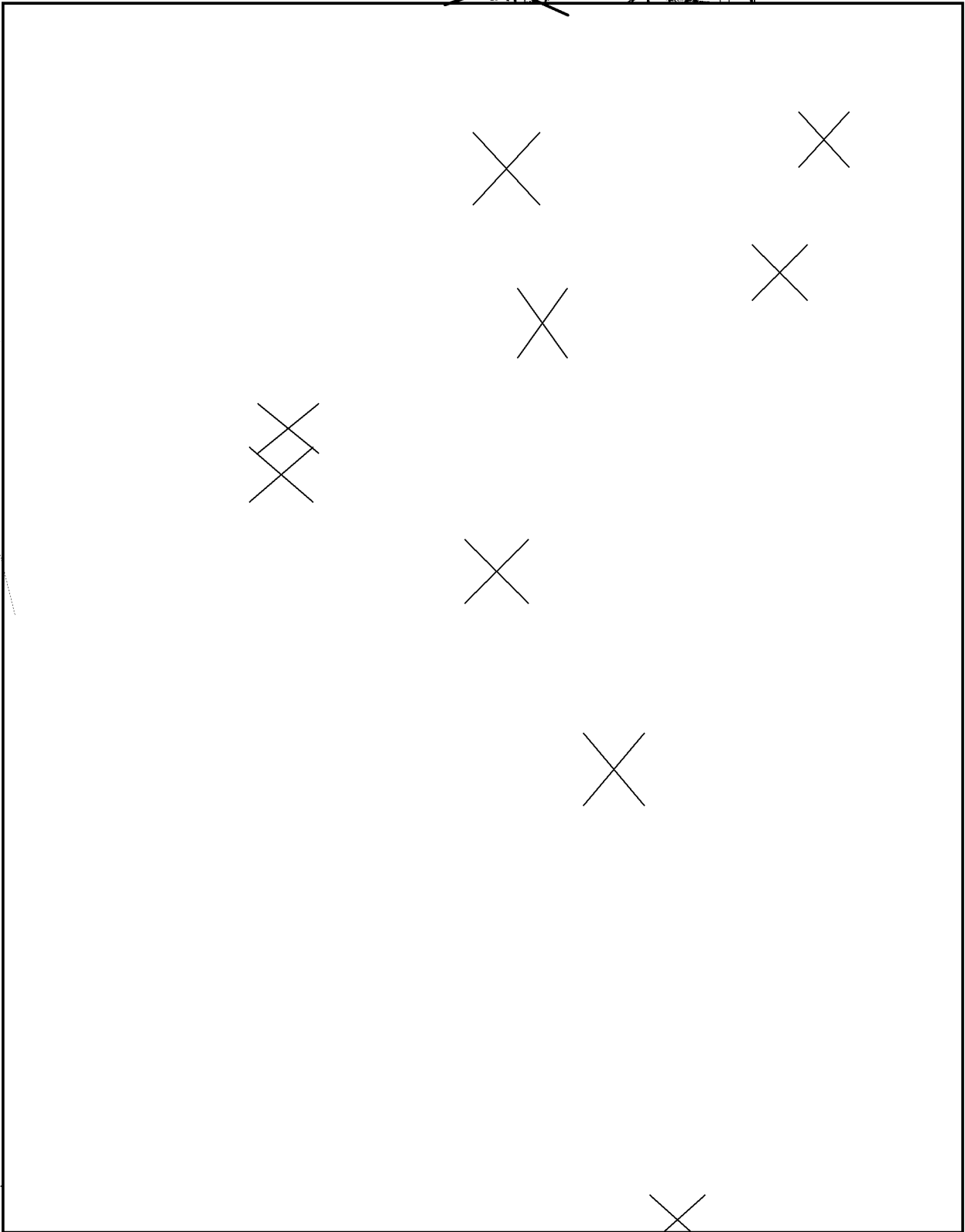
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FEDERAL BUREAU OF INVESTIGATION

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[redacted] was contacted at the Health and Safety Laboratory (HASL), Energy Research and Development Administration (ERDA), 376 Hudson Street, New York, New York, where he is employed as Director of HASL. [redacted]

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para 1, 2, 3
Class
per DOE
let 6/6/85
566850/ma
6/27/85

(C)

Interviewed on 5/13/76 at New York, New York File # WFO 117-273

SAs [redacted]

GCW:jst

Date dictated 5/14/76

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[redacted] conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.

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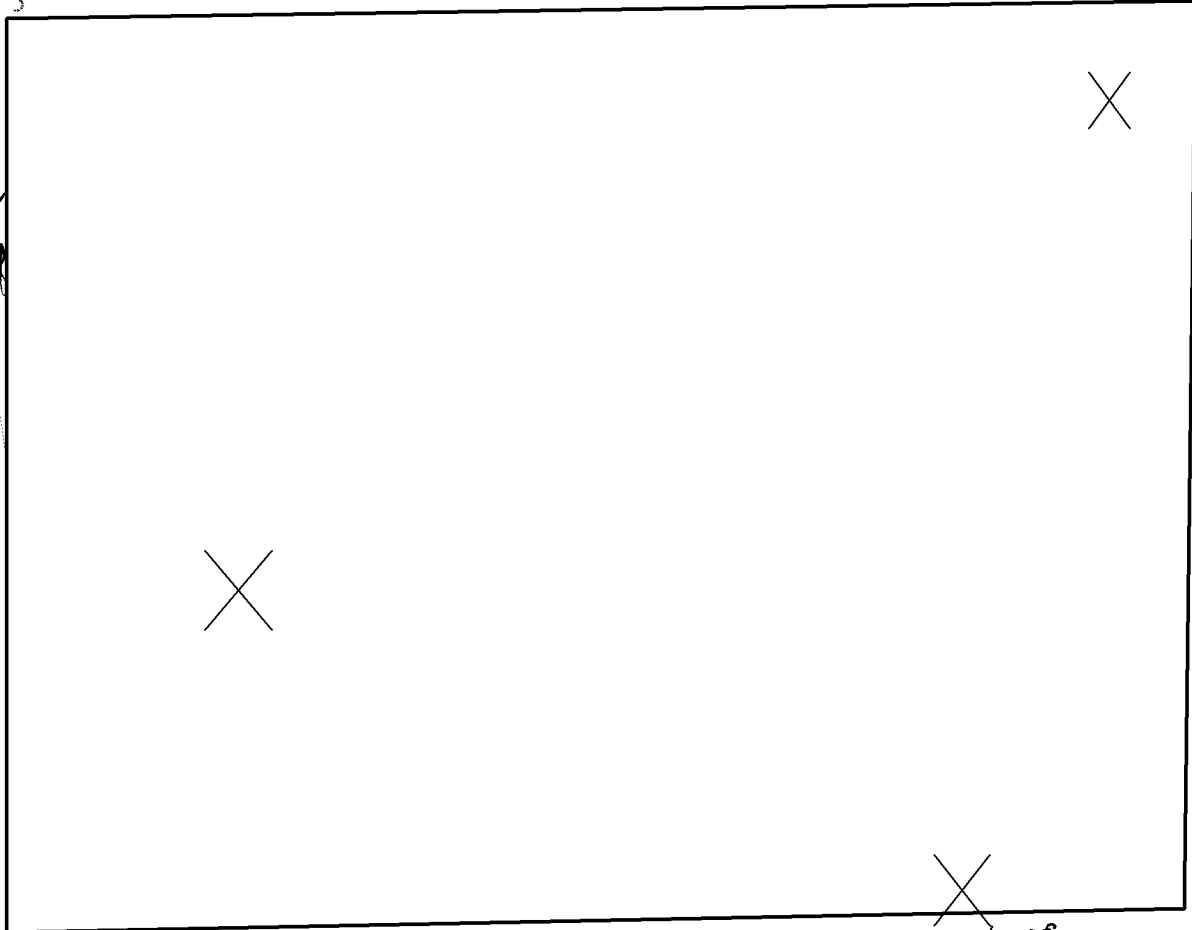
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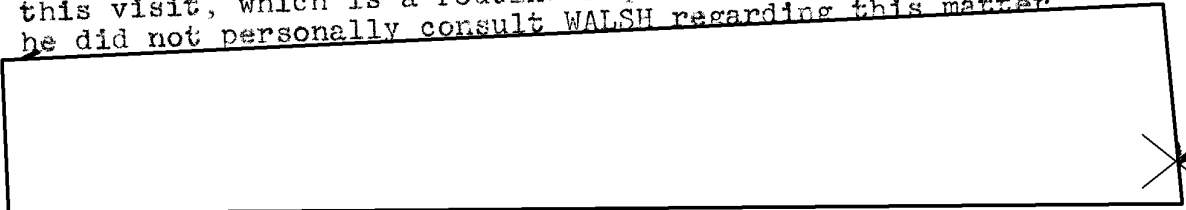
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let. 6/6/85
5668507/mj
4/27/85



[redacted] advised he did not make a report of this matter to the Atomic Energy Commission (AEC) Headquarters in Washington, and did not receive any instructions or pressures to do so. He remembered this matter did come to the attention of their Chief of Security at HASL then, HARRY WALSH, during the normal course of business. He believed this notification to WALSH actually resulted when WALSH reviewed the visitor logs and desired to know the nature of this visit, which is a routine inquiry. [redacted] advised he did not personally consult WALSH regarding this matter.

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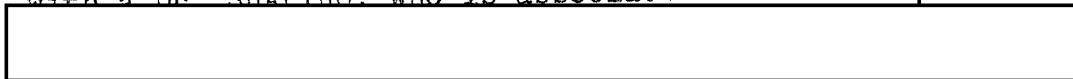
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Also, [redacted] related that he was not acquainted with a Dr. SHAPIRO, who is associated with NUMEC. [redacted]

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On May 11, 1976, the following was obtained from JAMES CONNOR, Secretary to the Cabinet and Staff Secretary to the President, by [redacted] who identified themselves to Mr. CONNOR as Special Agents of the FBI: b6 b7C

Mr. CONNOR served as the Director of Planning and Analysis at the Atomic Energy Commission (AEC) from May, 1972, until the end of 1974 when he assumed duties at the White House. He has no first hand knowledge of the Nuclear Materials Equipment Corporation (NUMEC) or ZALMAN SHAPIRO, nor any real knowledge of the NUMEC situation obtained through his service at AEC. The first time Mr. CONNOR heard of NUMEC was four or five months ago when it was mentioned by his Secretary, [redacted] who during the 1960s, was the "prime" secretary to the Science Advisor on the White House Staff, a position which no longer exists. The above mention of NUMEC by his secretary was forgotten.

His current interest in the NUMEC situation was kindled indirectly by an article which appeared in "Time Magazine" about six weeks ago which was titled to the effect "How The Israelis Got The Bomb." Mr. CONNOR said that he is not technically knowledgeable in matters pertaining to nuclear weapons, but has learned enough to sense that there were a number of inconsistencies in the article. [redacted] b1

(C)

[redacted]

However, the above set of circumstances prompted Mr. CONNOR to look into the NUMEC situation. [redacted]

(S)

[redacted] He then looked at what information was available through the AEC, particularly their investigation of NUMEC's shortages of U-235 material. He described himself

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[redacted]

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WFO 117-273

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as appalled over what he felt was the superficiality of the AEC investigation with regard to NUMEC and SHAPIRO. He specifically noted the following items he considered to be weaknesses in the AEC effort:

NUMEC was believed to be in a weakened financial position, yet was able to pay about \$800,000 to the AEC for lost uranium. It was reported that the above was possible through a bank loan but insofar as Mr. CONNOR has been able to determine, no effort was made to verify the existence of a bank loan.

Mr. CONNOR felt that the AEC interview of SHAPIRO was not of a penetrating nature and that AEC officials failed to ask a large number of logical questions. (S) (u)

(S) Failure to explore SHAPIRO's contacts with DAVID LOWENTHAL [redacted] puzzled Mr. CONNOR. (S) (u) (S)

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Mr. CONNOR did not understand the ready acceptance by AEC that significant records and material may have been destroyed in a vault fire at NUMEC.

He considered that the AEC's continued acceptance of NUMEC's sloppy procedures might be merely a glaring example of beaurocratic incompetence, but he is puzzled as to why the investigative effort directed at SHAPIRO and NUMEC seemed suddenly to come to a stop.

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para 1,2,4,5,6
per DOE let 6/6/85
56685LD/muf 6/7/85

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WFO 117 273

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per DOE
2/26/85
566851/nd
4/7/85



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JOHN MARSH, Counselor to the President, and WILLIAM HYLAND, Deputy Assistant to the President for National Security Affairs, were interviewed at the White House on May 12 and 14, 1976, respectively, by SAs [redacted]

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[redacted] Both Mr. MARSH and Mr. HYLAND advised that they had no personal or first-hand knowledge of ZALMAN SHAPIRO and the Nuclear Materials and Equipment Corporation. Both advised that they are privy to only that information furnished by JAMES CONNOR, Secretary to the Cabinet and Staff Secretary to the President, and some of that information gathered by [redacted]

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It is noted that the results of Mr. CONNOR's interview are set out above.

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UNITED STATES GOVERNMENT

Memorandum

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EXEMPTED FROM AUTOMATIC
DECLASSIFICATION
AUTHORITY DERIVED FROM:
FBI AUTOMATIC DECLASSIFICATION GUIDE

EXEMPTION CODE 25X(1.6)
DATE 03-13-2009

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Ext. Affairs _____
Files & Com. _____
Gen. Inv. _____
Ident. _____
Inspection _____
Intell. _____
Laboratory _____
Legal Coun. _____
Plan. & Eval. _____
Spec. Inv. _____
Training _____
Telephone Rm. _____
Director Sec'y _____

TO : Mr. T. W. Leavitt

- 1 - Mr. N. P. Callahan
- 1 - Mr. J. B. Adams

DATE: 5/18/76

FROM :

- 1 - Mr. T. W. Leavitt
- 1 - [Redacted]
- 1 - [Redacted]

SUBJECT: ZALMAN MORDECAI SHAPIRO
ATOMIC ENERGY ACT
OBSTRUCTION OF JUSTICE

12/7/83 50-4 elu/alan
Comp. # 240,619
566861/10/5/11/15

This memorandum is to advise that the initial two week investigative report concerning captioned investigation has been prepared and submitted to the Department of Justice. This report is attached.

This investigation was instituted upon request of the Attorney General on 4/29/76 to determine whether or not a diversion of special nuclear material had occurred at the Nuclear Material Equipment Corporation (NUMEC) in the 1960's. At that time, this corporation was partially owned and operated by Shapiro. The investigation was also to determine if a diversion had taken place [Redacted]

The investigation set forth in the attached report includes interviews of numerous individuals who were initially mentioned by the Attorney General as having information to furnish in regard to NUMEC and Shapiro. The report also reflects interviews of other pertinent individuals and the results of reviews of government records regarding this possible diversion. The report indicates that no evidenciary material or facts that would indicate a diversion has taken place exist. The interviews conducted to date reflect supposition and theories based on analysis of circumstantial information.

This investigation is continuing to receive priority attention.

ACTION: For information.

Enclosure

RKM:ddc
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APPROVED:	Ext. Affairs.....	Laboratory.....
Assoc. Dir.....	Fin. & Pers.....	Legal Coun.....
Dep. AD Adm.....	Gen. Inv.....	Plan. & Eval.....
Dep. AD Inv.....	Ident.....	Rec. Mgnt.....
Dep. Dir.....	Inspection.....	Spec. Inv.....
Adm. Serv.....	Intell.....	Training.....

Classified by 5019
Exempt from GDS, Category Number 2
Date of Declassification Indefinite

14 1976

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

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FBI AUTOMATIC DECLASSIFICATION GUIDE
EXEMPTION CODE 25X(1,6)
DATE 10-15-2008

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BUREAU OF INVESTIGATION

FIELD	OFFICE OF ORIGIN WASHINGTON FIELD	DATE 5/14/76	INVESTIGATIVE PERIOD 4/29/76 - 5/13/76	TYPED BY jst
SUBJECT MORDECAI SHAPIRO		REPORT MADE BY SA [REDACTED]		
CHARACTER OF CASE AEA: OOJ				

REFERENCE: WFO nitel 5/13/76 captioned "DIVERT".
- P -

ADMINISTRATIVE

"DIVERT" is the code name for the above captioned case, utilized in other communications to Headquarters.

This report has been classified "Top Secret", due to the highly sensitive nature of this investigation and material discussed herein obtained from extremely sensitive sources and methods.

The unauthorized disclosure of same would cause ^{grave} serious damage to the National Security. (X) (u)

ACCOMPLISHMENTS CLAIMED				<input type="checkbox"/> NONE	ACQUIT- TALS	CASE HAS BEEN: PENDING OVER ONE YEAR <input type="checkbox"/> YES <input type="checkbox"/> NO PENDING PROSECUTION OVER SIX MONTHS <input type="checkbox"/> YES <input type="checkbox"/> NO
CONVIC.	PRETRIAL DIVERSION	FUG.	FINES	SAVINGS		

APPROVED	SPECIAL AGENT IN CHARGE
COPIES MADE	

- (4) - Bureau (117-2564)
- 1 - WFO (117-273)

Dissemination Record of Attached Report

Agency	1 - AFAC
Request Recd.	1 - AFAC
Date Fwd.	5/17/76
How Fwd.	RW/AR
By	

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WFO 117-273

Much background information obtained from interviews noted in this report has been reported in the Administrative Background portion of the cover page inasmuch as this type information is not of the nature normally reported utilizing the FD-302 form.

ADMINISTRATIVE BACKGROUND

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WFO 117-273

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In addition to information in FD-302, on May 11, 1976, HAROLD D. THORNBURG, Acting Deputy Director, Office of Inspection and Enforcement, Nuclear Regulatory Commission (NRC), advised that JOHN A. HIND, Chief of the Safeguards Branch, NRC Region 3, 799 Roosevelt Road, Glen Ellyn, Illinois, had formerly been employed by Atomic Energy Commission at Oak Ridge, Tennessee, and had been involved in the inspections of the NUMEC plant in the past. Further, [redacted]

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[redacted] Energy Research and Development Administration (ERDA), telephone number [redacted] had conducted investigations at NUMEC in the past relative to unexplained losses by the plant of U-235. [redacted] who is currently employed by ERDA at Brookhaven National Laboratories, Upton, New York, telephone number [redacted] also had indicated to THORNBURG that he had been involved in previous AEC inquiries at NUMEC. [redacted], a health physicist currently at the Albuquerque Operations Office of ERDA, had indicated in the past that he had been interested in possible health hazards at NUMEC and had commented that he had been involved in an inspection at NUMEC during which he had spent most of an entire night sitting in the rain at the NUMEC plant while attempting to discover any wrongdoing there. [redacted] Division of Safeguards, NRC, is currently conducting inquiries on behalf of NRC concerning the NUMEC plant.

para 1, 2, 3
unclassified
per NRC
letter
2/15/85
SGL
5/10/85

THORNBURG expressed the opinion that current techniques employed by ERDA and NRC would readily differentiate between plutonium poisoning and poisoning resulting from overexposure to U-235. He added that urine and feces specimens from persons suffering from poisoning from U-235 would show a low beta reading while plutonium poisoning would show a high gamma reading, as well as an Americium content. He concluded that U-235 poisoning should be readily detectable from any other type radiation poisoning. (S)(u)

THORNBURG also informed that NRC considers U-235 enriched to 20 percent higher to be classified as weapon grade; although NRC and ERDA usually strive for 93 to 97 percent. Further, U-235 beyond 20 percent requires very little additional treatment to be incorporated into an actual or operation atomic bomb. (S)(u)

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letter
2/15/85
5668
SLD/mef
5/10/85*

In addition to information in FD-302, on May 11, 1976, KENNETH R. CHAPMAN, Director, Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory Commission (NRC), advised that one of the best-qualified persons at NRC to furnish information concerning SHAPIRO and NUMEC was RALPH G. PAGE, Deputy Director, Division of Safeguards, NRC, who had been involved with the reports of investigation conducted by the Atomic Energy Commission concerning SHAPIRO and NUMEC. He also advised that [REDACTED] both with Energy Research and Development Administration (ERDA) have an interest in and should be knowledgeable concerning the NUMEC plant.

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On May 11, 1976, RALPH G. PAGE, Deputy Director, Division of Safeguards, Nuclear Regulatory Commission (NRC), furnished the following information to SAs [redacted] and [redacted] in addition to that reported on FD-302.

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In connection with the reported loss (MUF) of about 100 kilograms of U-235 by the Nuclear Materials and Equipment Corporation (NUMEC) which was discovered by the Atomic Energy Commission (AEC) in 1965, AEC investigation subsequently determined this loss to be about 60 kilograms and to have occurred over a six-year period from about 1959 to 1965. Prior to 1965, AEC had not required NUMEC to make a complete physical inventory of U-235. In late 1965 or 1966, AEC sent a task force headed by Dr. SAMUEL C. T. MC DOWELL to conduct an inquiry into NUMEC operations. This task force submitted a report in 1966 to Dr. GLEN SEABORG, Chairman of AEC and based upon recommendations arising from the task force report, AEC established in 1967 the Office of Safeguards and Materials Management and a new Division of Nuclear Safeguards, with a view to preventing future losses such as occurred at NUMEC. (S)(u)

As related by PAGE, DOUGLAS GEORGE was the head of the AEC Division of Nuclear Materials Management in 1965 and would be knowledgeable concerning NUMEC. GEORGE is presently a Vice President of a private firm, Nuclear Surveillance and Auditing Corporation (NUSAC), in the Washington, D.C. (WDC), area.

At this same time in 1965, JOHN VINCIGERRA (phonetic), was AEC Assistant General Manager for Administration and should be knowledgeable concerning NUMEC. He is retired from AEC and is a Vice President of an unknown firm in Joplin, Missouri.

The following other persons were also at AEC in 1965 and should be knowledgeable concerning the NUMEC matter:

HAROLD PRICE, former AEC Director of Regulations.

CHRISTOPHER HENDERSON, former AEC Assistant Director of Regulations, who is now retired, residing on the Eastern Shore of Maryland.

*paragraph 2-7 unclassified per
DOE letter 6/6/85 5668 523/mjy 6/7/85*

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EBER R. PRICE, former AEC Chief of State and Licensee Relations, who is retired in the WDC area and involved with an Episcopal Church on Massachusetts Avenue in WDC.

WILLIAM T. RILEY, former AEC Director of Security, who was rumored to have been terminated at AEC for borrowing money from AEC subordinates in order to gamble on horseracing.

PAUL GAUGHRAN, former Director of Security at AEC, who succeeded RILEY and who retired and is currently a consultant to the Joint Committee on Atomic Energy (JCAE).

[redacted] former member of AEC Task Force which inspected NUMEC under MC DOWELL. [redacted] following the NUMEC inspection went to work for NUMEC as head of its Accountability Section and he is currently employed by the International Atomic Energy Agency Secretariat in Vienna, Austria. b6 b7C

[redacted] who was formerly employed with the Nuclear Fuel Services in West Valley, New York, and later in 1966 or 1967 by AEC in the Division of Nuclear Materials Safeguards. He is currently employed as a Vice President for the E. R. Johnson Associates, a private firm in the WDC area, which is a competitor of NUSAC.

[redacted] formerly AEC inspector from the Oak Ridge Operations Office who was believed to have participated in NUMEC inspections and who is believed to be currently assigned to the Oak Ridge Operations Office of Energy Research and Development Administration (ERDA), Oak Ridge, Tennessee.

CHARLES A. KELLER, an AEC Assistant to [redacted] at the Oak Ridge Operations Office, who is now retired, possibly in Oak Ridge, Tennessee.

[redacted] former AEC inspector with Chicago Operations Office of AEC and who is currently assigned to the ERDA Chicago Operations Office.

*all paragraphs under per Doc letter
6/6/85 566152D/jmy 6/7/85*

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During interview of JAMES CONNOR, Secretary to the Cabinet and Staff Secretary to the President, on May 11, 1976, CONNOR advised that the President is aware of instant matter and extremely interested in it. The President feels that it is necessary as best as possible to understand what happened at WUFO and circumstances surrounding the situation. He is particularly concerned with any indication of a prior cover-up. The President has met with Senators PASTORE and BAKER of the Joint Congressional Committee on Atomic Energy relative to this matter and it has been agreed that the Committee will take no action until the investigation is complete. It has also been agreed that the matter is on a need-to-know basis at the White House and at the Committee. It is CONNOR's understanding that only Senators PASTORE and BAKER and GEORGE MURPHY of the Committee are aware of the investigation. At the White House, only four people know of the investigation and it is the hope of the White House that the investigation will not come to the attention of the general public.

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JOHN MARSH, Counselor to the President, and WILLIAM HYLAND, Deputy Assistant to the President for National Security Affairs, both advised that both the Joint Congressional Committee on Atomic Energy and Representative JOHN DINGELL of the Environmental Study Conference have shown an interest in the NUMEC matter. MARSH is certain that DINGELL may suspect diversion of the material involved, inasmuch as he has stated that he feels the full story has not come out. MARSH suggested that BRENT SCOWCROFT, the President's National Security Advisor, and [redacted] of the U.S. Arms Control and Disarmament Agency, may have something to offer regarding instant matter. HYLAND suggested that [redacted] of the National Security Council Staff may have information regarding NUMEC.

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GEORGE MURPHY was interviewed in his office, Room H 403, in the Capitol on May 13, 1976, for over an hour, during which time he provided no substantive information and the names of only four individuals at the Atomic Energy Commission (AEC) to be contacted for information, names already recognized by WFO as individuals to be contacted in this matter. After attempts to determine the reason for his committee's renewed interest in this case, MURPHY finally and apparently reluctantly responded by saying that for such information the interviewing agents would have to contact JOHN MINTZ at FBI Headquarters. When asked whether the committee was in possession of any information whatsoever which would be of assistance to the Bureau in its current investigation, he again referred the agents to MINTZ for such data. He declined to discuss the current state and the degree and the nature of the Committee's interest at this time.

Of possible interest is a reference made by MURPHY to an opinion rendered by the Department of Justice on March 3, 1966, to the effect that the circumstances suggesting a possible conflict of interest on the part of [redacted] and his employment by NUMEC did not warrant further inquiry [redacted]

(S)

[redacted] He added that there is no one on the Committee staff now who is knowledgeable in the matter in question. MURPHY said the matter is being held quite close on the staff, and he prided himself in the fact that his committee and staff have had an outstanding record for maintaining necessary security.

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NUMEC EMPLOYEES
BY POSITION AND TIME FRAME

ZALMAN MORDECAI SHAPIRO
President
1956-1967

OSCAR SHALOM GRAY
Vice-President - Treasurer
1968

LEONARD P. PEPPONITZ
Vice-President
1968

JACK R. NEWMAN
Secretary, General Council
1965-1968

[REDACTED]
Manager of Energy Conversion Department
1966

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[REDACTED]
[REDACTED]
Manager, Nuclear Materials Control Department
1966-1968
Formerly Inspector, AEC, at least 1960-1965

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[REDACTED]
Office in Charge of Inventory of Vault at
NUMEC when fire occurred in 1966.

FREDERICK FORSCHER
Vice-President
Resigned 1968

MEREDITH S. JOHNSON
Controller Assistant Treasurer
1968

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LEON FOLK, JUNIOR
Director
1968

WILLIAM FONDILLER
Director
1968

I. F. LEVITT
Director
1968

PRESSLEY H. MCCANCU
Director
1968

[REDACTED]
1965-1968
Personal Assistant to SHAPIRO, NUMEC
1968 - became Consultant to Vice-President of
Consolidated Edison, New York.

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[REDACTED]
Employee, Accountability Section
Left NUMEC 1966

[REDACTED]
Chemist - trouble shooter
1961-1968

[REDACTED]
Security Officer
1968

[REDACTED]
Unknown position, NUMEC 1968-1969

[REDACTED]
Manager, Metallurgical and Plant Services
1968

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[REDACTED]
Manager, Hafnium Facility
1968

[REDACTED]
Director of Advanced Projects
1968

[REDACTED] Assistant,
Energy Conversion Department

[REDACTED]
Director of Research and Development
1968

[REDACTED]
Manager, Engineering and Accountability
1968

[REDACTED]
Manager, Accountant Section
1968

[REDACTED]
Manager, Nuclear Analysis and Utilities Service

[REDACTED]
Manager, Marketing

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ATOMIC ENERGY COMMISSION (AEC) EMPLOYEES
POSITION AND DATE HELD AT AEC

[REDACTED]

Director of Intelligence
1963 - 1968 (?)

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[REDACTED]

1963 - 1968

(C)

[REDACTED] (S)

b1

WILLIAM C. FIDY
Director, Division of Security,
1968

[REDACTED]

Chairman, 1968

b6
b7C

[REDACTED]

Assistant General Manager
1968

[REDACTED]

Office of the General Council
1969

[REDACTED]

Office of Safeguards and Materials Management
1968

CHARLES A. KELLER
Director, Production Division
Oakridge, Tennessee Facility, 1968

HOWARD MARSHALL
Chief, Nuclear Management Branch
Oakridge Tennessee Facility
1968

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unclass.
per DOE letter
6/6/85 5668
SLD/mef 6/7/85

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WFO 117-273

RMS:ist

2

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EDWARD HARTFILL
Chief, Nuclear Materials Branch
Cambridge, Massachusetts
1960

[REDACTED]
Isotope Branch Staff
1960-1967

He thereafter was relieved to Manager, Nuclear
Materials Control Department, AEC.

LAWRENCE D. LOW
Director, Division of Operations
1968

[REDACTED]
Cost Analysis and Evaluation Branch
Office of the Comptroller

[REDACTED]
Security Officer, Department
1968

[REDACTED]
Prior to 1960, Office of the General Counsel, AEC.
Cambridge, Mass. 1954-1964 was employed by Joint
Committee on Atomic Energy, 1954-1964 General
Counsel, JCEC.

[REDACTED]
Vice Chief, Section
New York Office, AEC
1966

[REDACTED]
Vice Chief, Section,
New York Office, AEC

[REDACTED]
Commissioner, AEC
1968-1970

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4, per DOE
letter 6/6/85
5668507/100
6/7/85

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WFO 117-273
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ROBERT (ROLLIE) LOWMYSTER
1950-1965 as either Assistant Director or Director,
Division of Licensing and Regulations, AEC.

b6
b7C

[REDACTED]
Formerly Manager of New York Operations, AEC
1966

SI GRADY
Director, Nuclear Materials Management,
New York Office.

[REDACTED]
Unknown position at AEC during pertinent period.
Aware of problems at WUREC.

[REDACTED]
Unknown position at AEC during pertinent period.
Aware of problems at WUREC.

Below listed are currently at Energy Research and
Development Administration or National Regulatory Commission
as indicated:

KENNETH P. CHAPMAN
Director, Office of Nuclear Materials,
Safety and Safeguards, NRC

[REDACTED]
Office of Nuclear Materials,
Safety and Safeguards, NRC

Both the above located at the Maryland National
Bank Building, 7700 Old Orchard Road, Bethesda.

HAROLD D. THOMPSON
Acting Deputy Director, Office of Inspection,
located at East West Towers, 4350 East West
highway, Bethesda, Maryland, NRC

4/7 per DOE
letter 6/6/85
5668549/mly
6/7/85

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WFO 117-273

RMS:jst

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HARVEY LYON

Director, Division of Safeguards and Security
Germanstown, Maryland, ERDA

ROBERT E. THARP

Deputy Director, Division of Safeguards and Security,
Germanstown, Maryland, ERDA

*per DOE ltr
6/10/85 5668
SEC/may 6/7/85*

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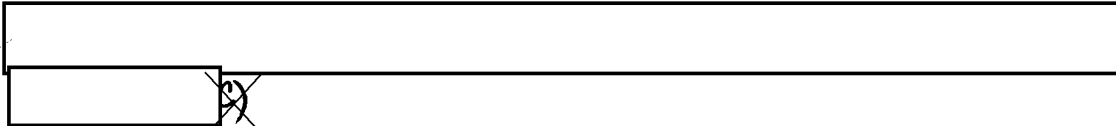
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WFO 117-273

LEADS

WASHINGTON FIELD

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(2) Will report results of additional interviews conducted on a continuing basis, proceeding in a manner to prevent unnecessary contacts which have no logical bearing in this matter.

(3) Will closely coordinate all activities with FBIHQ.

(C)



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~~TOP SECRET~~UNITED STATES DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATIONEXEMPTED FROM AUTOMATIC
DECLASSIFICATION
AUTHORITY DERIVED FROM:
FBI AUTOMATIC DECLASSIFICATION GUIDE
EXEMPTION CODE 25X(1,6)
DATE 10-16-2008

Copy to:

Report of: SA [REDACTED]
Date: 6/8/76
Field Office File #: 117-273
Title: ZALMAN MORDECAI SHAPIROOffice: Washington, D. C. b6
Bureau File #: 117-2564 b7CCharacter: ATOMIC ENERGY ACT;
OBSTRUCTION OF JUSTICE

Synopsis: Since 4/29/76, this investigation has been continuing, based upon a request of the United States Attorney General to determine whether or not a diversion of nuclear material had occurred at the Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, partially owned and operated by the subject, [REDACTED] (S) (S) b1

Investigation to date, including interviews of individuals reportedly in possession of information pertaining to this matter and review of some government records has resulted in locating no evidentiary material or statements of fact which are evidentiary in this matter.

- P -

DETAILS: AT WASHINGTON, D. C.

11-20-03
CLASSIFIED BY 60380MJC/BCE
DECLASSIFY ON: 25X16
6/17/76SP1 HSK/RBY
213
6/8/96 6/9/82
217,8225668 s.c.d./mby 5/13/85
12/8/83 SP-4 elw/alm
Comp # 240,619

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☆ U. S. GPO: 1975-0-575-841

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WFO 117-273

LEADS

WASHINGTON FIELD

AT WASHINGTON, D. C. (1) Will continue to report results of file reviews, and logical interviews conducted, with all activities coordinated at FBIHQ.

(2) Will report results of the file review of Livermore Laboratory files pertaining to NUMEC contacts.

(3) Will immediately advise FBIHQ of any major policy decision from other government agencies which will affect this investigation.

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WFO 117-273

The Attorney General of the United States requested that an investigation be conducted pertaining to the question of whether or not a diversion of nuclear material had taken place at the Nuclear Materials and Equipment Corporation (NUMEC), Aselle, Pennsylvania, partially operated and owned by the subject, ZALMAN MORDECAI SHAPIRO. [REDACTED]

(S)

[REDACTED] Investigation was initiated on April 29, 1976.

b1

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E.	[REDACTED]	16
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G.	[REDACTED]	13
H.	WILLIAM F. THOMPSON	27

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b7C

II. DOCUMENTS AND SOURCE INFORMATION

(S)

A.

[REDACTED]

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B.	NE T-1 INFORMATION	11
C.	INTERMEDIATE SUMMARY OF BACK-UP MATERIAL ON AEC REPORTS, APRIL 6, 1966, ON NUMEC	20

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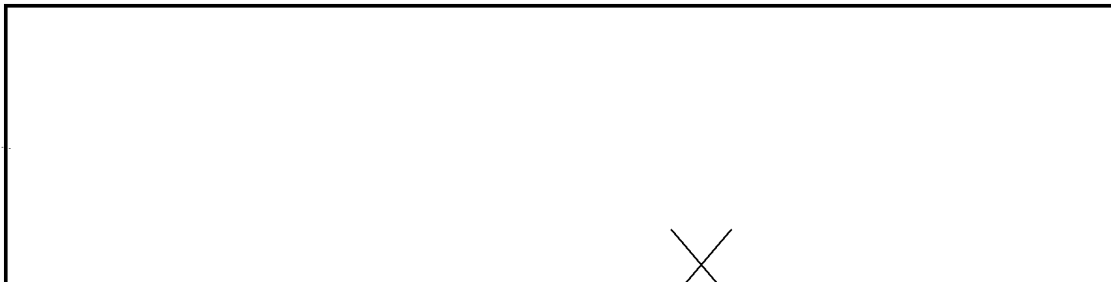
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WFO 117-273

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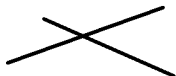
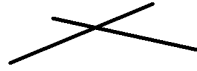
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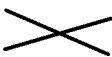
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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/25/76

1

On May 17, 1976, CHARLES D. BRENNAN, 487 North Owen Street, Alexandria, Virginia, a former Assistant Director of the Federal Bureau of Investigation (FBI), was advised by [] and [], who had identified themselves as Special Agents of the FBI, that he was being interviewed regarding his possible knowledge of prior FBI investigations concerning Dr. ZALMAN MORDECAI SHAPIRO and his firm, Nuclear Materials and Equipment Corporation (NUMEC) in Apollo, Pennsylvania, in connection with an investigation requested by the Attorney General.

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BRENNAN stated at the outset that he does not remember or recall any such case from his FBI investigative and administrative experience. He surmised that another possible reason for the contact with him might be his recent connection with the Mitre Corporation of Mc Lean, Virginia, for which firm he was under contract until last fall for the preparation of a research study on possible threats to nuclear facilities (Mitre Technical Report - MTR 7022 - dated September, 1975, and entitled "The Threat to Licensed Nuclear Facilities.")

BRENNAN related that during the period of the above contract, he became acquainted with [] of the Nuclear Regulatory Commission (NRC) in Bethesda, Maryland, who had been assigned as the project monitor for the above-referred-to study. It was [] who, according to BRENNAN, in connection with his duties at NRC in the fall of 1975, related that he recognized certain exploitable loopholes in the NRC security system. According to BRENNAN, [] based on his past experience within the Atomic Energy Commission (AEC) and on his current awareness of recognized opposition to the above-mentioned research study, for example, and other similar opposition, expressed grave concern that there had been a deliberate cover up by the AEC of a major incident several years [] at Apollo, Pennsylvania. []

per NRC
let. 2/18/85
5668 SLD/jmf
5/18/85

per DOE
let. 6/6/85
5668 SLD/jmf
6/7/85

(C)

[] At this time [] also referred to [] losses involving a nuclear facility in Erwin, Tennessee. b1

per NRC let.
2/18/85
5668 SLD/jmf
5/18/85

interviewed on 5/17/76 at Alexandria, Va. File # WFO 117-273
by SAs [] and HWS:jst Date dictated 5/20/76

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WFO 117-273

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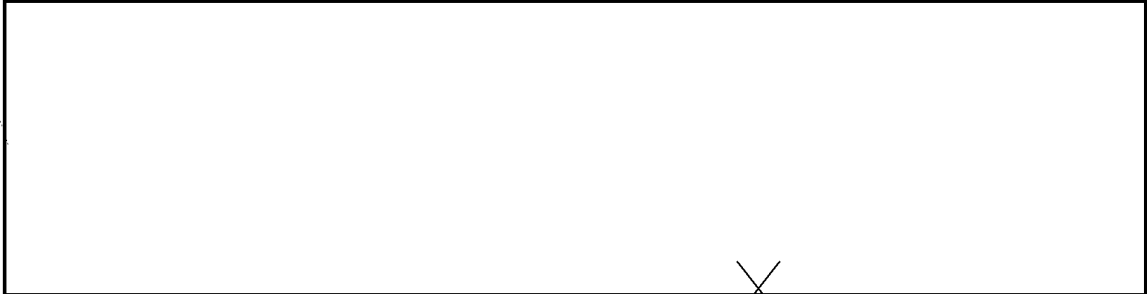
BRENNAN said this was the first time he became aware of a "NUMEC problem."

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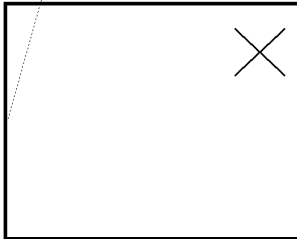
BRENNAN stated further that in March, 1976, [redacted] told him that he was in touch with GEORGE MURPHY and an assistant on the JCAE staff. BRENNAN said he also arranged for [redacted] to meet with one of Senator BAKER's aides, one [redacted]. Shortly after Easter of 1976, BRENNAN received a call from Senator BAKER, who wondered whether he should see [redacted] personally. BRENNAN said he suggested that, since he was not certain [redacted] had anything valid to offer, Senator BAKER's staff handle any contact with [redacted].

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BRENNAN commented that [redacted] who seemed very sincere in his concern about the existence of a tremendous danger to this country, was an unknown quantity to him.

BRENNAN concluded by suggesting that [redacted] at the Energy Research and Development Administration in Germantown, Maryland, be contacted for further information on Dr. SHAPIRO, NUMEC, and related matters.

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/21/761

DAN J. BRENNAN, JR., Retired, was contacted at his residence, 505 Brooklyn Boulevard, Sea Girt, New Jersey. At the outset of the interview, BRENNAN was advised by SA [redacted] this inquiry involved possible illegal collaboration by a Doctor ZALMAN SHAPIRO, who was associated with NUMEC (Nuclear Materials and Equipment Corporation), (U) [with the Israeli Government in that country's nuclear weapons program.] Further, BRENNAN was informed this matter was extremely sensitive and should be treated with the utmost confidentiality. He furnished the following information (S)

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BRENNAN advised he was a former Special Agent with the Federal Bureau of Investigation (FBI). He retired from the FBI during January, 1973. From approximately 1962 until 1971, he served at FBI Headquarters, Washington, D.C. (WDC), as a Section Chief in the Liaison Section. In this position he collected written reports from Special Agents who had the responsibility of maintaining regular contact with assorted government agencies regarding matters of interest to the FBI. [redacted] b1

(C) [redacted] (C) [redacted] Upon receipt of reports from employees like PAPICH and FITZGERALD, he would channel the information to the particular section which had the investigative responsibility for the violation in question.

Regarding his reported handling of documents from PAPICH dealing with Dr. SHAPIRO and NUMEC, BRENNAN stated he did not recall any information concerning SHAPIRO or NUMEC. He advised his administrative duties involved a voluminous quantity of paperwork, thereby making it impossible to become personally acquainted with every case that passed across his desk.

Furthermore, BRENNAN reported he was not familiar with a [redacted], and he was vaguely familiar with a [redacted] however, he was unable to attach any significance to [redacted] b6
b7C

Interviewed on 5/19/76 at Sea Girt, New Jersey File # WFO 117-273

SAs [redacted]

GCW:jst

Date dictated 5/21/76

by [redacted]

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FEDERAL BUREAU OF INVESTIGATION

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Date of transcription 5/25/76

On May 18, 1976, [redacted] Safeguards Analyst, Safeguards Division, Nuclear Regulatory Commission (NRC), Bethesda, Maryland, was advised by Special Agents (SAs) [redacted] and [redacted] after they had identified themselves as SAs of the Federal Bureau of Investigation (FBI), that the Attorney General (AG) of the United States (US) had specifically requested the FBI to conduct an investigation into the matter of the unexplained losses at a company called Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, and a man named ZALMAN SHAPIRO. The FBI was instructed to determine if, in fact, a diversion of material had taken place during the 1960s.

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*unclaw
per NRC let
2/15/85
566850/mef
5/13/85*

[redacted] advised that he has worked for the Atomic Energy Commission (AEC) since 1970. He has been with NRC since September, 1975. About eight months ago he came across the NUMEC situation during a safeguards study for the NRC. Previously, [redacted] had been detailed by the NRC to help on the Mitre Technical Report, published by the Mitre Corporation in September, 1975.

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[redacted] advised that he has no specific information pertaining to any details as to any possible diversion of special nuclear materials (SNM) at NUMEC. He does not know anyone who might possess this information [redacted]

(S)

Interviewed on 5/18/76 at Bethesda, Maryland File # WFO 117-273
by SAs [redacted] and AES:jst Date dictated 5/21/76

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WFO 117-273

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[] advised that the percentages of unaccountable SNM have increased, although the controls supposedly have been tightened by the Government. He advised that one really cannot definitely tell from the records available where the control over SNM is weak, allowing for a diversion. [] feels that a diversion has taken place and may be still taking place inasmuch as the unaccountable SNM is larger now than in the past. This may be due to poor procedures, but since he has tried to focus on the issue at NRC and has encountered opposition to his suggestions to solve the problems of unaccountability, he feels that someone is trying to keep information suppressed. Also, since SNM can be sold for a high price, there may be more than political motives involved, if a diversion had occurred and may currently be going on at NUMEC, and for that matter at other facilities such as the Nuclear Fuel Services (NFS), Erwin, Tennessee. b6 b7C

At the present time, the Safeguards Division of NRC provides control over the SNM so it can be accounted for and not diverted. There is an accounting every 60 days at various facilities. Although the system is much tighter with more regulations and controls, the loss is still greater on a percentage basis than in the past. [] advised that he has had technical experience in the past, and has worked in other areas with SNM, and not just safeguards. He feels that the current standards allow for too wide a margin of error as it is, not counting the unexplained losses.

In his opinion, unidentified individuals have been using the system for their personal gains by diverting material on an ongoing basis.

In the past when there has been a substantial unexplained loss of SNM and after inspections by NRC, the Director of the Regional Office, NRC, has signed the report, in fact writing off the loss, without any penalty to the licensed company involved.

He stated that one report that can be obtained from NRC for background information, that includes some of the 1960s' losses at NUMEC, is the "Overview Study of Existing Safeguards Regulations," dated April 16, 1976, as the first draft. The final draft is dated April 29, 1976. In addition, a report numbered S/HO - 75, pertaining to the compilation of material and accounting data of SNM, may be of interest.

*Paragraphs 1, 2, 3, 4, 5 unclassified per NRC
let. 2/15/85 5665 SCD/mby 5/13/85*

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WFO 117-273

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When there was too much unexplained loss or "MUF", there was and is no effective action being taken to keep this from happening again. He stated that there have been excessive MUFs at NFS and NUMEC, as licensed companies, of SNM on an ongoing basis for years. He also advised that also ERDA's accounting procedures have reflected very bad losses at their facilities.

[] feels that U-235 can be traced back to the facility which has processed it, based on the isotopic differences.

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He feels that the following areas should be looked into for any possible suppression of information for any motive: (1) Inspectors on the site; (2) Individuals on the Regional Levels with decision-making potential; and (3) the matter of those who control MUF, and weapons design information. If these areas are investigated, then one may be able to determine if there was a systematic diversion. He added that aspects of a classified nature would have to be cleared with RAY BRADY, Chief of Security, NRC, before [] felt that he could go into specifics. [] advised that he is also working with [] at NRC, with relationship to current problems at NRC. [] can also be helpful in this matter.

*Paragraphs 1, 2, 3 unclear per NEC
Act. 2/15/85 5665 5040 by 5/13/85*

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brackets) clear
per DOE let
6/6/85
5668547/mef
6/7/85

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INVESTIGATION AT LIVERMORE, CALIFORNIA

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18

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FEDERAL BUREAU OF INVESTIGATION

1

Date of transcription 5/27/76

On May 24, 1976, [] Security Officer, Lawrence Livermore Laboratory (LLL), Livermore, California, was advised of the identities of the contacting agents. [] was advised that contact was being made in conjunction with an investigation requested by the Attorney General of the United States pertaining to possible diversion of nuclear materials from Nuclear Materials and Equipment Corporation (NUMEC), Apollo, Pennsylvania, at the time ZALMAN SHAPIRO was in charge of that company. [] was cautioned that this investigation was of a highly sensitive nature.

[] advised that he is a former Special Agent (SA) of the Federal Bureau of Investigation (FBI).

[] stated that at the present time there are about 1.5 million classified documents at LLL, located in about 100 different locations. However, there were less documents at LLL during the early 1960s. He was not sure of the location of charge out for the files used in the 1960s.

[] made available the following from the personal file of []

Dates of employment at LLL:

Extended military leave:

Date of birth:

Place of birth:

Height:

Weight:

Hair:

Eyes:

6'0"

180 pounds

Brown

Gray

On July 13, 1959, [] went to Rocketron to discuss ion rocketry. He worked on the "Rover" project pertaining to the slow nuclear reaction that fueled rockets. This project proved to be successful. Dr. THEODORE MERKLE was his immediate supervisor who died in the mid 1960s (S) (S) (u)

Interviewed on 5/24/76 at Livermore, California File # WFO 117-273
by SAs [] and [] AES:jst Date dictated 5/27/76

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WFO 117-273

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[redacted] to [redacted] legally changed his name from [redacted] in 1957.

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At the time he was hired, he was expecting to obtain a PhD in nuclear physics and was in the upper 10 percent of his class at Harvard University. His references were:

Dr. NORMAN RAMSEY, Professor, Harvard University

Dr. J. C. STREET, Chairman, Physics Department, Harvard University

Dr. W. PRESTON, Director, Cyclotron Laboratory, Harvard University, Cambridge, Massachusetts

[redacted]

(S)

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On May 20, 1968, the Atomic Energy Commission (AEC) expressed an interest in [redacted] since he had left the United States for Israel and had changed his name to [redacted]. Since THEODORE MERKLE was deceased at that time, the Joint Committee on Atomic Energy interviewed MERKLE's assistant, [redacted].

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[redacted] (S) (u)

The results of these inquiries were not noted in [redacted]'s file.

[redacted] added that he had no personal knowledge of [redacted] or of NUMEC operations.

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[redacted]

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WFO 117-273

AES:jst

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On May 24, 1976, [redacted] Security Officer, b6
Lawrence Livermore Laboratory (LLL), Livermore, California, b7C
made available the following files:

Name:

Position:

[redacted]
Assistant to the Deputy Director,
LLL, Livermore, California
Director, Nevada Test Site,
LLL, and part of the "Z"
Division of LLL.

Clearance:

Top Secret Q, February, 1948,
to May, 1951, worked at Berkeley
with clearance reverified
June 2, 1948
October, 1952, to present carried
clearance

Employment:

February, 1948, to May, 1951
at LLL.
April, 1943, to January, 1946,
in military.
May, 1951, to October, 1952,
recalled.
October, 1952, to present, LLL.

Education:

1948 AB Degree from Berkeley,
University of California

Date of birth:

Place of birth:

[redacted]

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Height:

6 feet, 2 inches

Weight:

185 pounds

Eyes:

Blue

Hair:

Brown

Function at LLL:

Engineer for management functions
and testing

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WFO 117-273

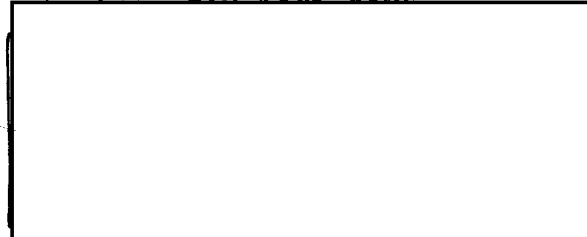
2

Marital status:

Married with four sons

Trips:

(S)



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Name:

MAX EARL HARRIS

Employed at LLL:

February 5, 1948, to present

Date of birth:

November 12, 1914

Place of birth:

Grayburg, Texas

Height:

6 feet, 2 inches

Weight:

185 pounds

Hair:

Brown

Eyes:

Gray

United States Army:

1946 to 1948

Education:

BS Degree in Mechanical
Engineering

Married:

1st wife, PATRICIA FELDMAN
HARRIS
2nd wife, RUTH HAUVER
3rd wife, 1963, NAOMI SMITH
HARRIS

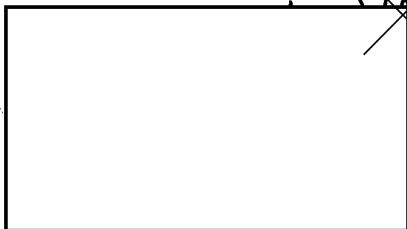
Travel:

1966 and 1968 travelled in
Europe. In Tel Aviv December 9,
1968, through December 12, 1968

Function:

Special Materials procurement
from other companies

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/26/76

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(S)

(C)

On May 24, 1976, [redacted] Assistant to the Deputy Director, Lawrence Livermore Laboratory (LLL), Livermore, California, working as Director, Nevada Test Site, LLL, [redacted] was advised by [redacted] who identified themselves as Special Agents (SAs) of the Federal Bureau of Investigation (FBI), that the interview was in regard to his possible knowledge of one Dr. ZALMAN MORDECAI SHAPIRO, and his firm, Nuclear Materials and Equipment Corporation (NUMEC) in Apollo, Pennsylvania, pursuant to an investigation of a highly sensitive nature requested by the Attorney General of the United States.

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From memory, [redacted] recalled that NUMEC had dealings with LLL from about 1962 and 1965. At that time, [redacted] recalled, NUMEC was working under contract with LLL and was dealing in plutonium (P 238). The whole matter of dealing with NUMEC was a "mess". [redacted] only met SHAPIRO once when he came to the laboratory at Livermore, and was accompanied by one MAX HARRIS, of LLL. Other material may have been contracted, but [redacted] was not sure, since several years have passed, and [redacted] had no recall pertaining to other material.

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When it came time to terminate working relationships with NUMEC over the P 238 contract, there were questions about how to handle the contaminated equipment and material loss. Since the difference of material lost and amount of contaminated equipment noted by NUMEC seemed to be more than that expected by LLL, one [redacted] of LLL went to NUMEC to determine how bad the clean-up was going to be. [redacted] determined that the problem was not as bad as NUMEC had indicated from the series of proposals suggested by NUMEC to resolve the problem. [redacted] remembered a figure of \$130,000 that reflected the estimate of material and equipment in question that could be accounted for by loss and contamination. (S) (u)

[redacted] found that equipment NUMEC claimed to be contaminated, was in fact, not contaminated, nor had it been used. The material processed at that time was for the LLL "Pluto" reactor, and there was quite a discrepancy in the (u) (S)

Interviewed on 5/24/76 at Livermore, California File # WFO 117-273
by SAs [redacted] and AES:jst Date dictated 5/26/76

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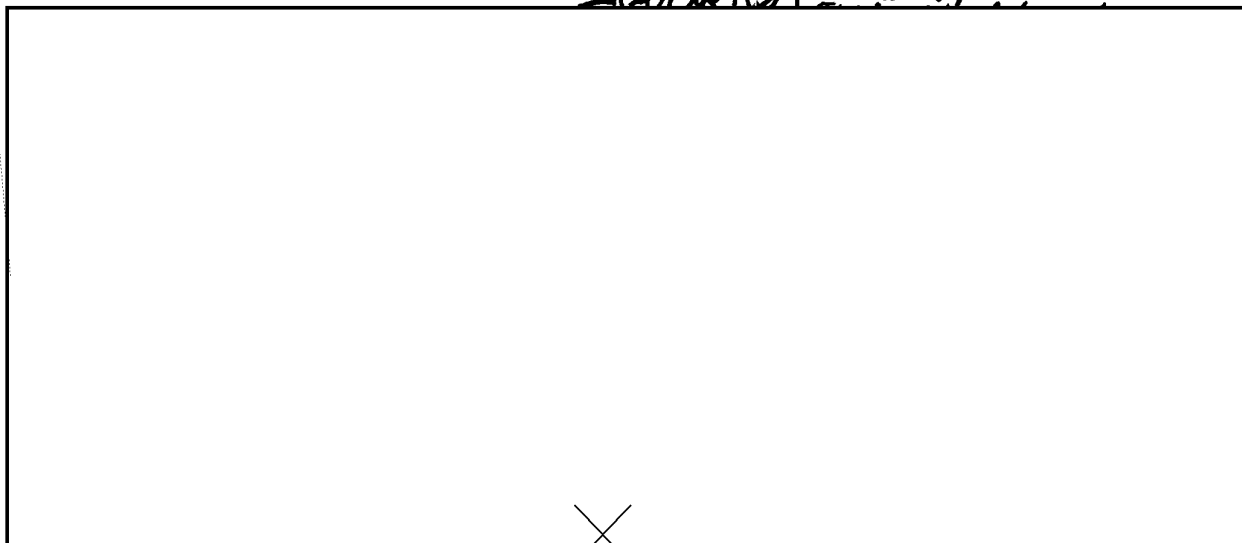
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WFO 117-273

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balance of material at the time of the proposed termination of the contract. MAX HARRIS may have detailed information pertaining to this discrepancy. ~~(S)(X)(A)(S)~~ *unclass per DOE let 6/6/85*

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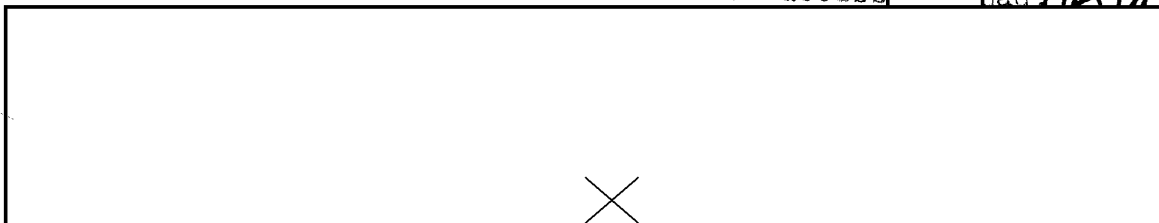
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At the staff meetings and seminars, new ideas were discussed and [redacted] was in attendance at these conferences. These meetings gave him the opportunity to have "access" to information pertaining to the manufacture of nuclear weapons.

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Continuing from memory, [redacted] recalled being in Washington, D.C., and had discussed with [redacted] the access [redacted] had and [redacted] departure to Israel. [redacted] conducted an investigation pertaining to [redacted] but apparently could not establish exactly what kind of access [redacted] had. *(S)(u)*

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MAX HARRIS, who worked on the "Pluto" project, should also know [redacted] ~~(S)(X)(A)(S)~~ *(S)(u)*

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[] advised he did not know SHAPIRO very well, but the one time he met him, he obtained the opinion that SHAPIRO could not be trusted. His personality gave [] this feeling.

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 6/1/761

On May 24, 1976, MAX EARL HARRIS, Mechanical Engineer, Lawrence Livermore Laboratory (LLL), Livermore, California, was advised by [redacted] who identified themselves as Special Agents (SAs) of the Federal Bureau of Investigation (FBI), that the interview was with reference to a highly sensitive investigation being conducted on request of the Attorney General of the United States.

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HARRIS advised that he has been aware of the problems LLL has had with Nuclear Materials and Equipment Corporation (NUMEC) for years. LLL commercial purchasing people had problems with NUMEC because the costs during the contract work had accelerated beyond the normal expected range. Besides Plutonium, NUMEC also handled Uranium (U-235). HARRIS recalled that at one time 20 grams of special nuclear material (SNM) from NUMEC was located at the Coors facility, for no explained reason. This type of incident was frequent and caused problems of accountability. HARRIS said that he would make available a copy of his file pertaining to dealings with NUMEC and reported unaccountable losses of SNM.

[redacted] Oak Ridge National Laboratories, who is in charge of the light water reactor and in charge of the U-235 facility, may know more about NUMEC's problems of accountability than anyone else, since he has dealings with NUMEC.

Because of the continuing problems with NUMEC, HARRIS decided to keep a file on NUMEC activities with LLL, which contain both direct and indirect information pertaining to separate incidents.

*am DOE
ed. 6/10/85
5668 scd/mly
6/7/85* (S) (X) HARRIS advised that he did not remember [redacted] and could not place him as an LLL employee in the "Pluto" project. HARRIS added that he once met ZALMAN (S) (u) SHAPIRO when SHAPIRO visited the LLL, but did not have personal contact with SHAPIRO to the extent that would be considered a personal acquaintance.

Interviewed on 5/24/76 at Livermore, California File # WFO 117-273
by SAs [redacted] hd AES:jst Date dictated 5/27/76

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FEDERAL BUREAU OF INVESTIGATION

1Date of transcription 6/1/76

On May 24, 1976, [redacted] Lawrence Livermore Laboratory (LLL), Livermore, California, after being advised of the identity of the interviewing agents, was advised that the Attorney General of the United States had requested an investigation into the possible diversion of nuclear material by an East Coast firm, and in conjunction with this investigation some background data was requested at LLL. [redacted] He stated that he remembered [redacted] as working on the "Pluto" project during the early 1960s. [redacted] was a heavy-set individual with dark features. He was best described as a loner. He worked for an individual named [redacted] formerly with LLL. [redacted] worked on a nuclear reactor project for nuclear powered missiles. [redacted] probably worked very little with highly classified material [redacted] since he was also working on some more advanced concepts along with the "Pluto" project. Nevertheless, some LLL employees did get involved in weapons research activity. [redacted] stated that he cannot recall if [redacted] personally had access to weapons information. [redacted] did calculations and paper work that was sent to the computer center where weapons material was processed.

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[redacted] was a very religious individual. He was a cantor at the Synagogue in San Francisco, California. [redacted] lived in San Francisco proper and drove back and forth to work each day. This was quite a task then, since there was no four-lane highway to Livermore during the early 1960s. [redacted] had a friend, [redacted] who might know more about [redacted] activities at that time.

Weapon documents used by LLL at that time, during the early 1960s went into storage during 1966 and 1967. [redacted] used to work with the documents and may know where the records pertaining to document charge outs are located.

[redacted] apparently moved to Washington, D.C., and may be employed by a company known as "IDA."

Interviewed on 5/24/76 at Livermore, California File # WFO 117-273
SAs [redacted] and AES:jst
by [redacted] Date dictated 5/27/76

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WFO 117-273

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On June 1, 1976, during review of back-up material used in connection with the preparation of the Atomic Energy Commission (AEC), April 6, 1966, report on Nuclear Materials and Equipment Corporation (NUMEC) (MC DOWELL Report) a prior draft of the report was observed. This draft contained a number of suggested changes which were ultimately included in the final report. The suggested changes did not appear to dilute the report in any way but added to the material and made certain portions of the report more specific.

Also during the above review, it was noted that the team that conducted the interviews of then current and former NUMEC employees was composed of [redacted] [redacted] (SEC) and [redacted]. These individuals then composed the "Shipping Procedures" team were [redacted] now at NPC: [redacted] and [redacted] of Division of International Affairs.

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Classified by 56054/mk

~~Declassify on: OADR~~
~~FOIA~~

Date 5/20/76

(U) The attached pertains to the investigation involving possible diversion of nuclear materials to the Israeli Government in the 1960's by a U.S. firm (NUMEC) operated by Zalman Shapiro. The case was reopened on the orders of the Attorney General. (C)(u)

11-30-63
CLARK, E. B. / 6-290 PW / 6-6 / MLT/316
DECLASSIFIED BY: A5 / APPROVED

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Former SA [redacted] interviewed 5/10/76.
Results to follow [redacted]

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Classified by 5019, XGDS 2, Indefinite.

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Assoc. Dir. <i>[Signature]</i>	Fin. & Pers.....	Legal Coun.....
Dep. AD Adm. <i>[Signature]</i>	Gen. Inv.....	Plan. & Eval.....
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EXEMPTED FROM AUTOMATIC
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FBI AUTOMATIC DECLASSIFICATION GUIDE
EXEMPTION CODE (25X) (S)
DATE 10-16-2008

FEDERAL BUREAU OF INVESTIGATION

REPORTING OFFICE WASHINGTON FIELD	OFFICE OF ORIGIN WASHINGTON FIELD	DATE 5/19/76	INVESTIGATIVE PERIOD 5/14/76 - 6/7/76
TITLE OF CASE ITALIAN MURDERAL SHAPERS		REPORT MADE BY SA [REDACTED]	TYPED BY JSC b6 b7C
11-20-03 CLASSIFIED BY 60296 AUC/Dea/mk/hrs DECLASSIFY ON: 25X1 AS AMENDED (C)		CHARACTER OF CASE ANA - 003 [REDACTED]	

5/13/76
56686
12/8/83
SP-4 [REDACTED]
Comp. # 440,619

WFO report of SA ALBERT F. SEDDON, 5/14/76,
concerning "DIVERT".

Classified By 9598
Exempt from GDS, Category 2
Date of Declassification INDEF.

ADMINISTRATIVE

"DIVERT" is the code name for the above captioned case, utilized in other communications to Headquarters.

This report has been classified "Top Secret" due to the highly sensitive nature of this investigation and information disclosed here is obtained from extremely sensitive sources and methods. (S) (u)

The unauthorized disclosure of same would cause grave damage to the National Security. (S) (u)

ACCOMPLISHMENTS CLAIMED						<input type="checkbox"/> NONE	ACQUIT- TALS	CASE HAS BEEN:
WIC.	PRETRIAL DIVERSION	FUG.	FINES	SAVINGS	RECOVERIES	PENDING OVER ONE YEAR <input type="checkbox"/> YES <input type="checkbox"/> NO		

APPROVED
COPIES MADE:

SPECIAL AGENT
IN CHARGE

DO NOT WRITE IN SPACES BELOW

- ① - Bureau (117-2504)
1 - WFO (117-275)

Class. & Ext. P.
Reason: [REDACTED]
Date of [REDACTED]
SP1 MSK/RBJ
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6/9/82

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Dissemination Record of Attached Report

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Notations

1-AGS Adm. 10/76
Did not wish to keep
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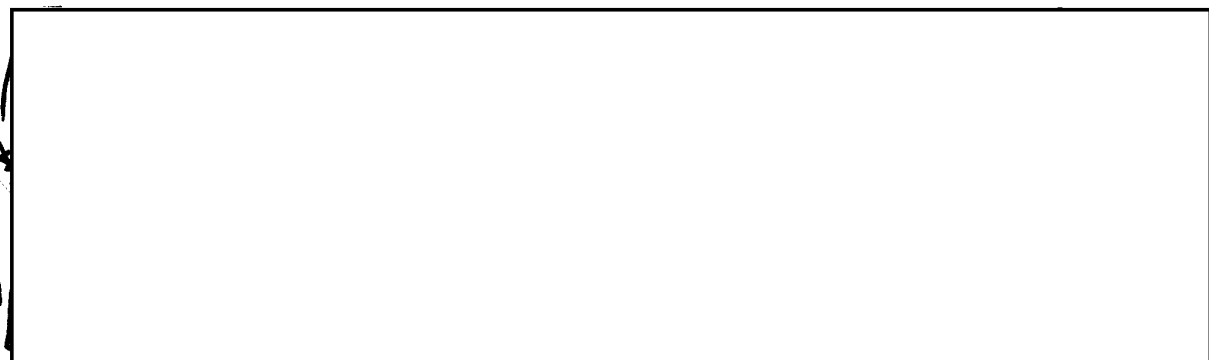
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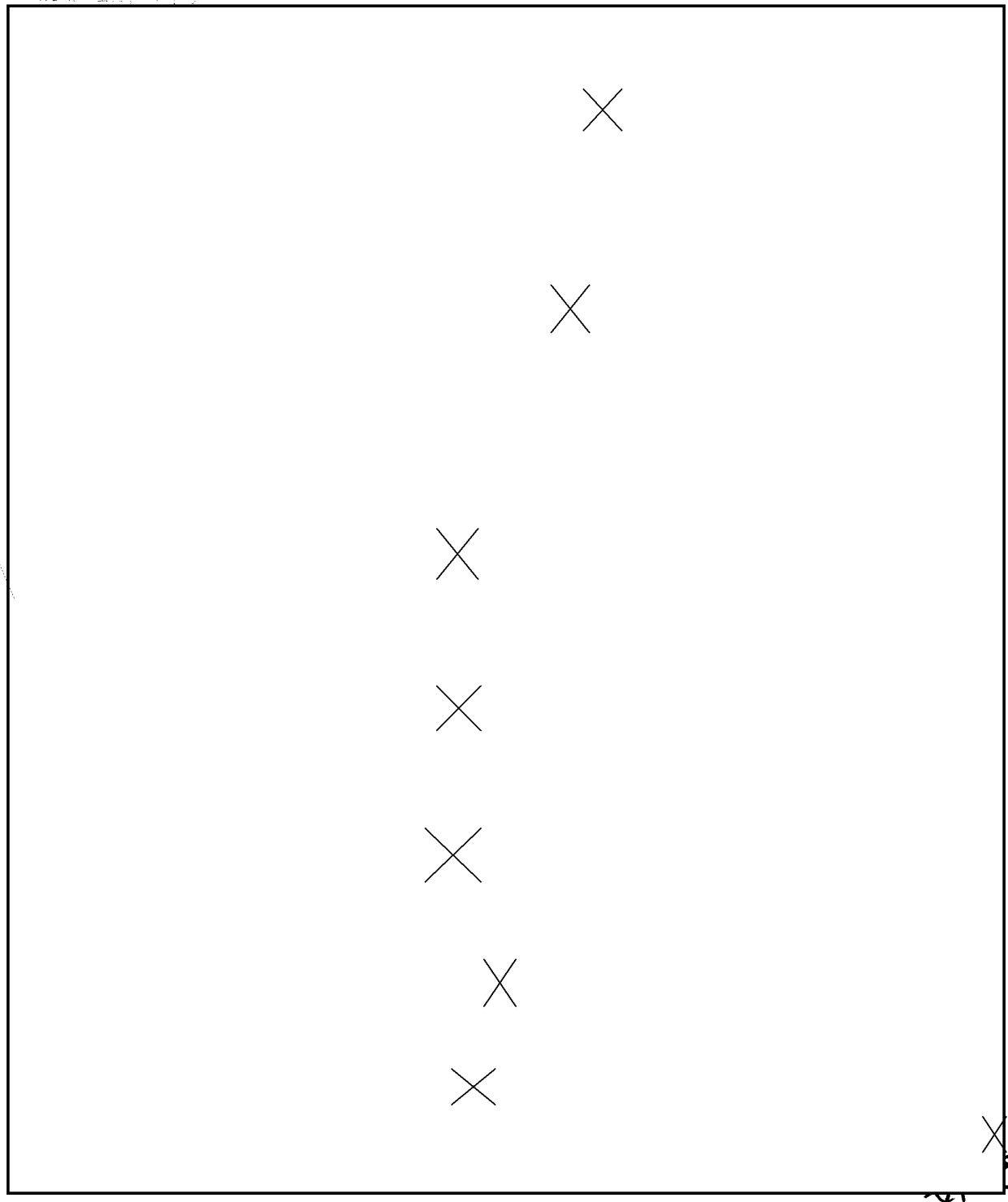
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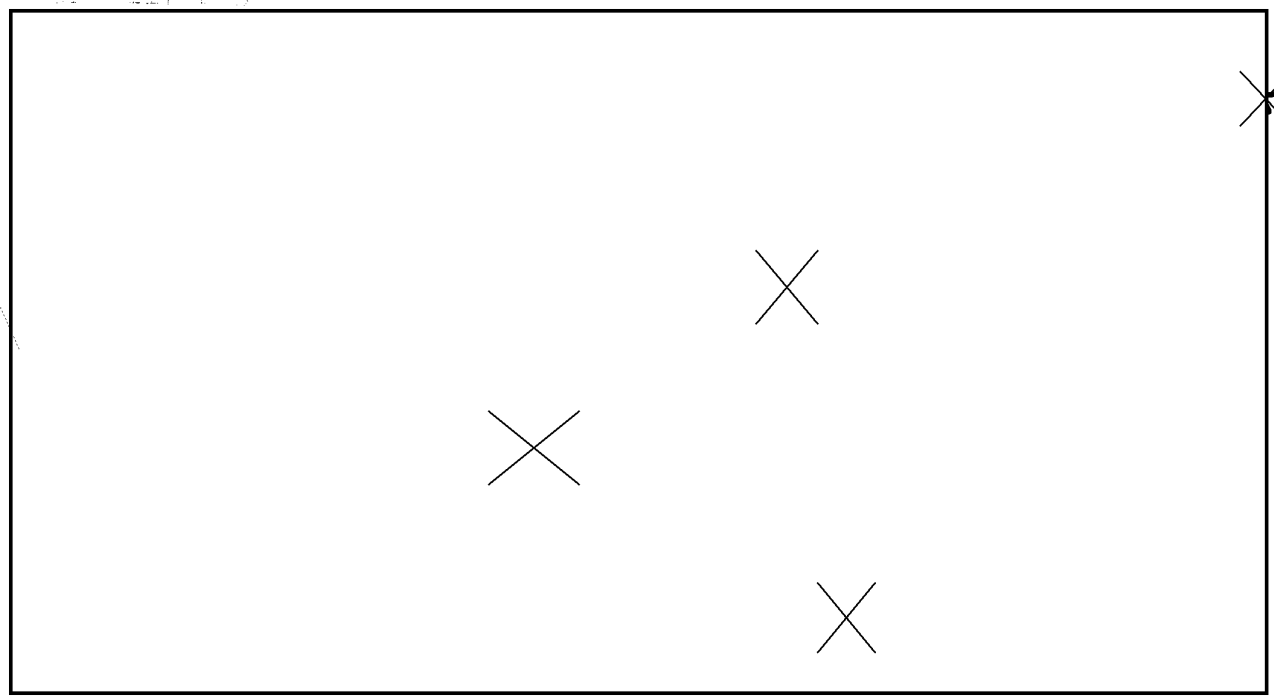
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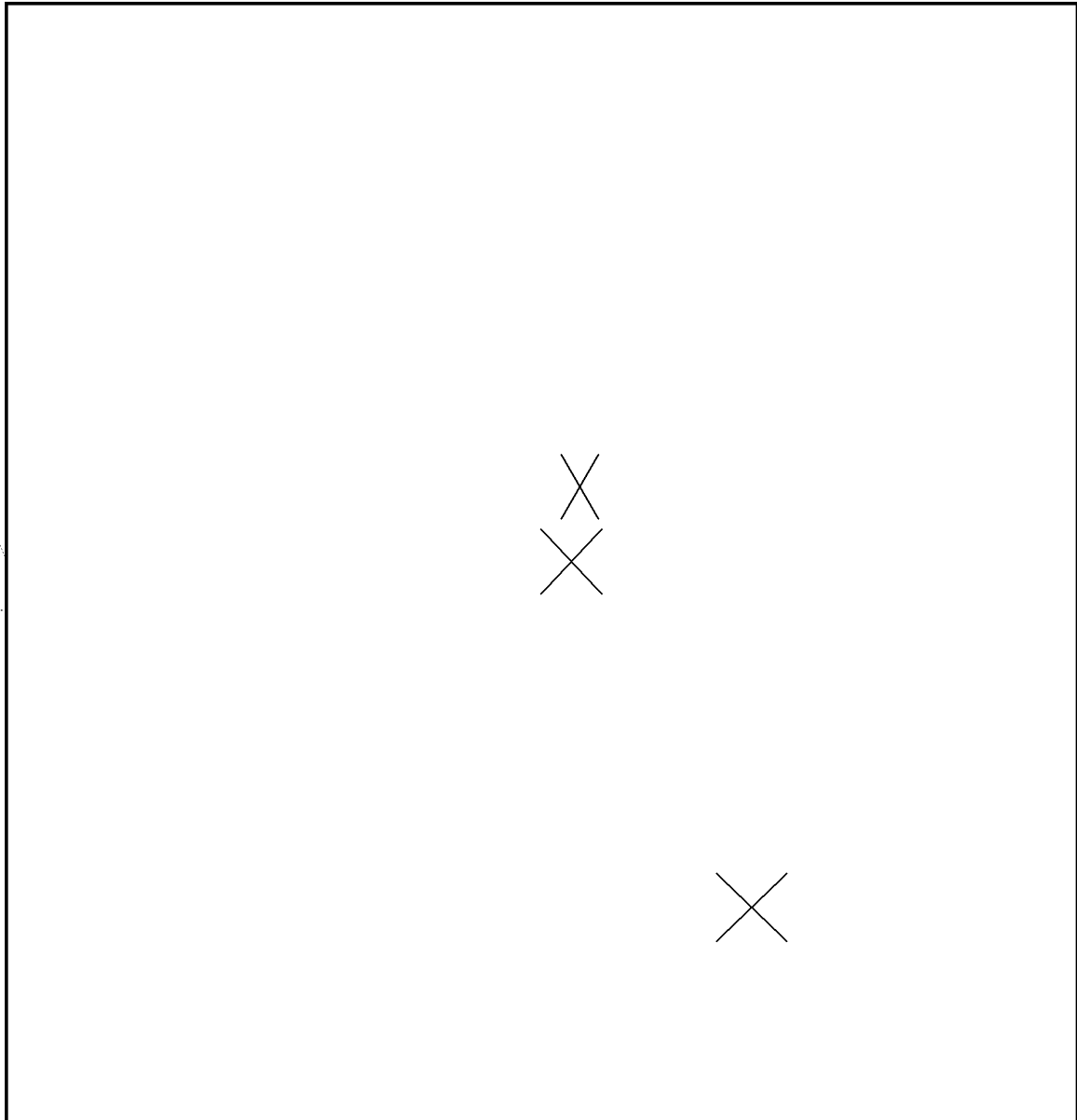
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Nuclear Materials and Equipment Corporation (NUMEC)
employees with Top Secret "TS" clearances as of 1965: ~~(u)~~



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NUMEC employees with Top Secret "Q" clearances
as of 1971:



Notes in NUMEC file reflected: [redacted]
AEC, was with NUMEC. [redacted] AEC, Division of
Material, was with NUMEC.



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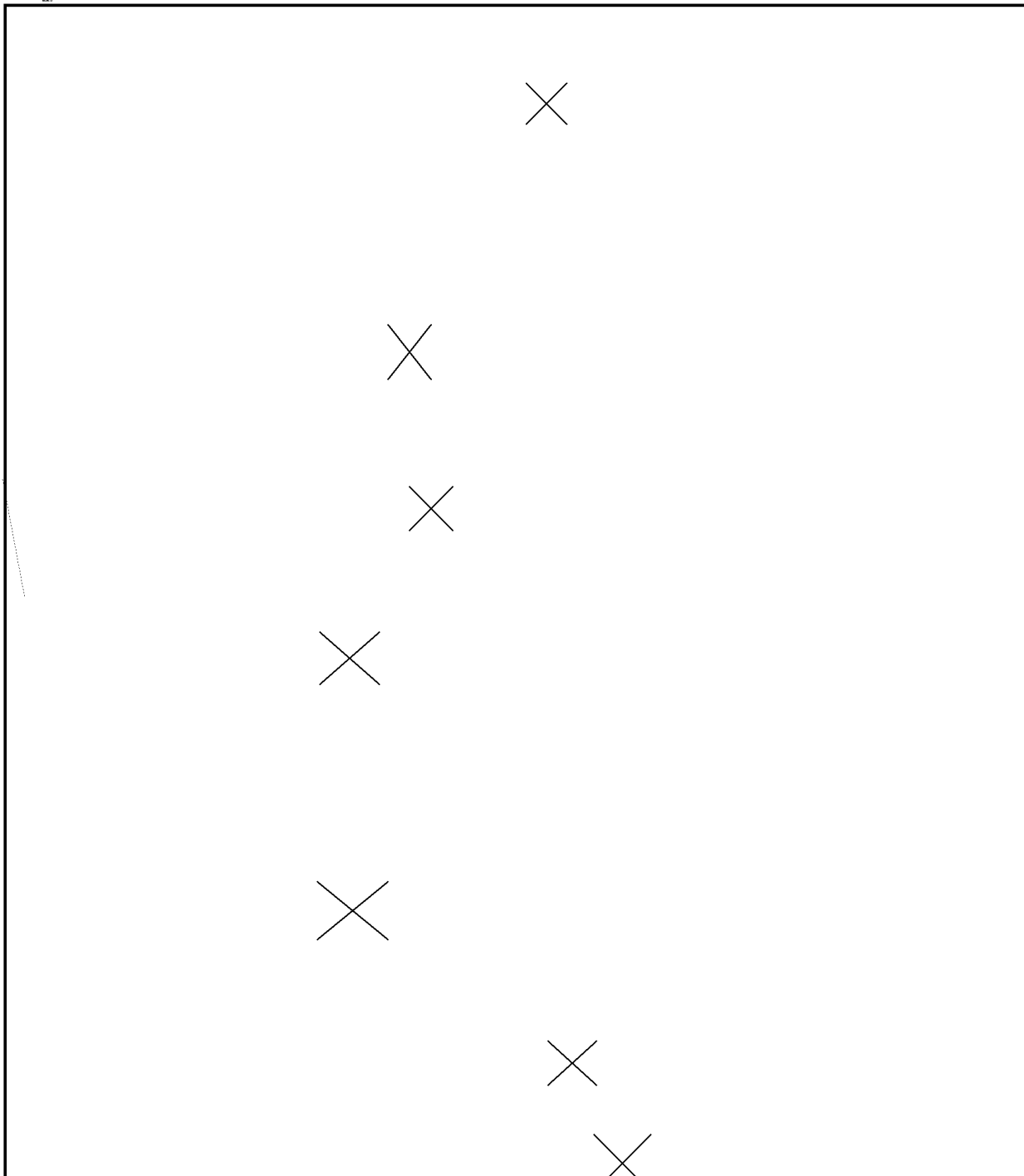
On May 14, 1976, SA [redacted] was in contact with JOHN MARTIN, Acting Deputy Chief, Internal Security Section, Criminal Division, U.S. Department of Justice, Washington, D.C., who made available for review those Departmental files (two in number) pertaining to Dr. ZALMAN MORDECAI SHAPIRO and the Nuclear Materials and Equipment Corporation (NUMEC). Those files contained intradepartmental memoranda, Federal Bureau of Investigation (FBI) investigative reports, and official correspondence primarily to and from the Atomic Energy Commission.

(C) No communication was observed which specifically qualified the investigative direction to be taken in the FBI's 1968 inquiry in the SHAPIRO-NUMEC matter. Nor was there observed a copy of reported correspondence between the [redacted] (C) (F) (S) b1
[redacted] and the then Attorney General, RAMSEY CLARK, supposedly dated in early April, 1968. It should be noted that with reference to the latter, MARTIN advised that he had requested a search to be made through any RAMSEY CLARK correspondence still maintained by the Department of Justice. This search was carried out without locating the correspondence in question, according to MARTIN.

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
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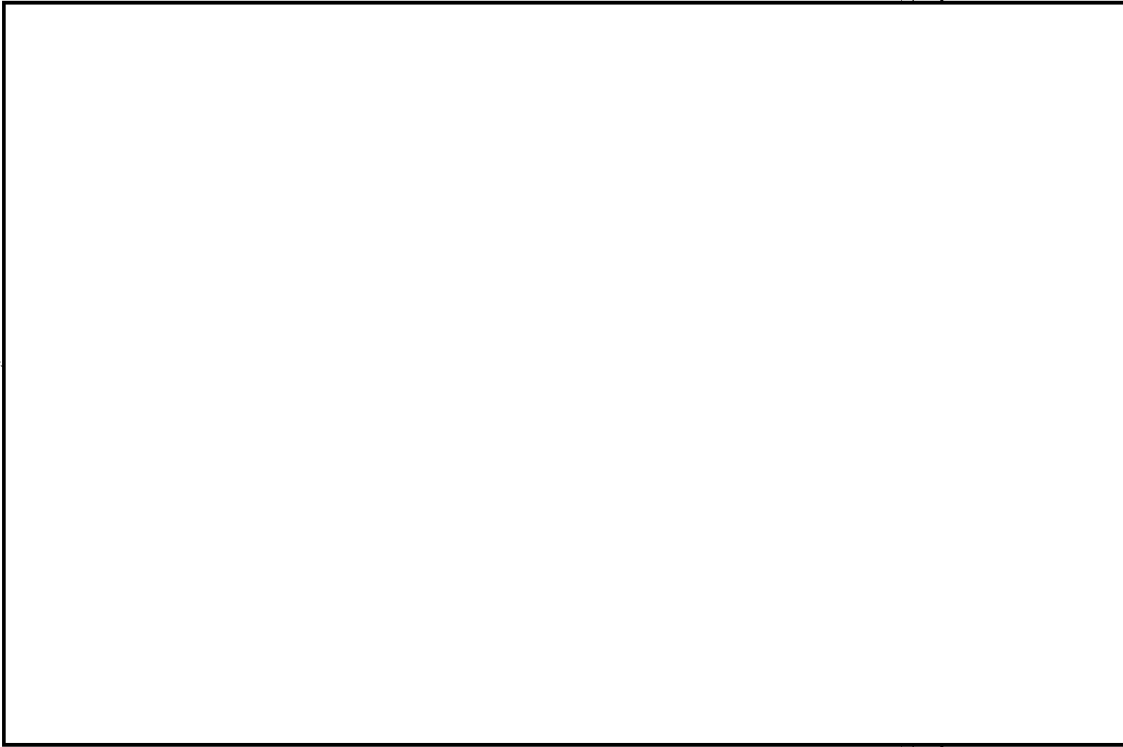
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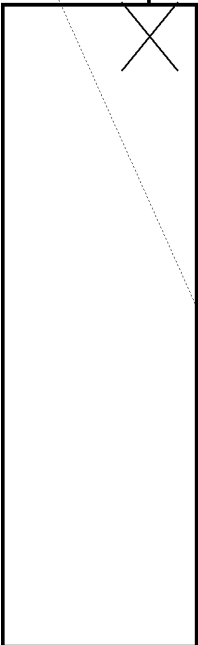
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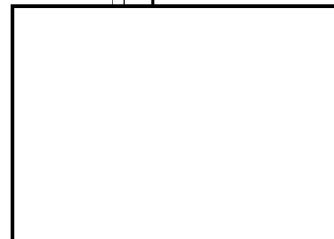
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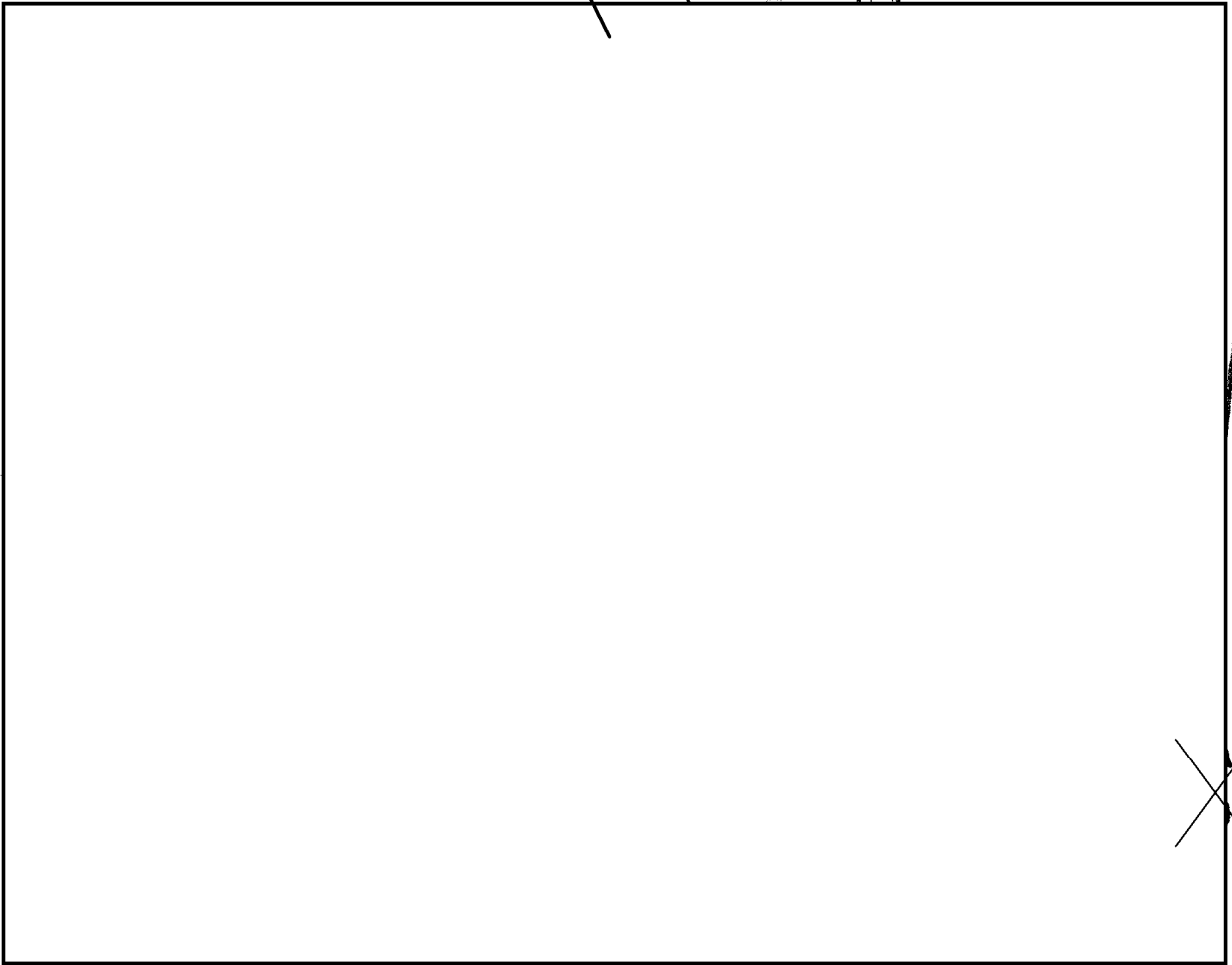
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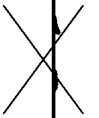
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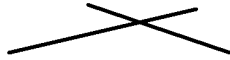
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